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From: Chief of Naval Operations

Subj: AIM-54 PHOENIX MISSILE SYSTEM, NAVY TRAINING SYSTEMS PLAN

(NTSP), N88-NTSP-A-50-8007C/A

Ref: (a) OPNAVINST 1500.76

1. Subject NTSP is approved and forwarded per reference (a).

2. Subsequent NTSP review will examine both the effectiveness and efficiency of training outlined in this document.

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Distribution: (one copy unless otherwise indicated)

FKM14

SNDL	
A1J1A	PROGRAM EXECUTIVE OFFICER TACAIR
A3	CNO (N4J, N889H, N955)
A5	CHNAVPERS (Pers-221, 4, 432)
24A1	COMNAVAIRLANT (N422F, N85)
24A2	COMNAVAIRPAC (N422F, N85)
26B3	COMNAVSURFRESFOR (N71)
26F3	COMOPTEVFOR
42L1	FIGHTER SQUADRON LANT (VF-101)
<b>42</b> S1	AIR TEST AND EVALUATION SQUADRON LANT (VX-1)
<b>42S2</b>	AIR TEST AND EVALUATION SQUADRON PAC (VX-9)
42RR	COMNAVAIRESFOR (N427, N741)
42UU1	SWATSLANT
C58J	NAMTRAGRUDET (Mayport, Norfolk, North Island, Oceana, Whidbey Island)
C80H	NAVAIRWARCENWPNDIV DET GUAM (NAWMU 1)
C84M	NOCPACDIV DET (Fallbrook)
FF5	NAVSAFECEN (Code 43)
FF60	NAVSTKAIRWARCEN FALLON (N7A)
FJA10	NAVMAC (Codes 3, 34, 54)
FKA1A	COMNAVAIRSYSCOM (PMA205, PMA259, AIR-3,4,1)

NAVICP (PHILADELPHIA (M059))

FKP1H NAVORDCEN (IMSD Mechanicsburg (NAMSO, 632, 05331, 8532E), NWADIV

Corona, WPNSTA Seal Beach (F3221), Yorktown (053A), Earle (8023))

FKP4E NAVSURFWARCENDIV (Crane (Code 503A), Dahlgren (Code G61), Indian

Head (Codes 5820, 650), Port Hueneme)

FKR6A NAVAIRWARCENACDIV (Patuxent River (Code SY55), Indianapolis (Codes

921, 933), Lakehurst (Code 52772), TSD Orlando)

FKR6B NAVAIRWARCENWPNDIV (China Lake (341000D), Point Mugu (311200E))

FKR6C NAVAIRWPNSTA (China Lake, Point Mugu)

FKR7B NAESU

FKR7C NAVAIRTECHDATAENGCOM

FT1 CNET (T252) FT2 CNATRA (2)

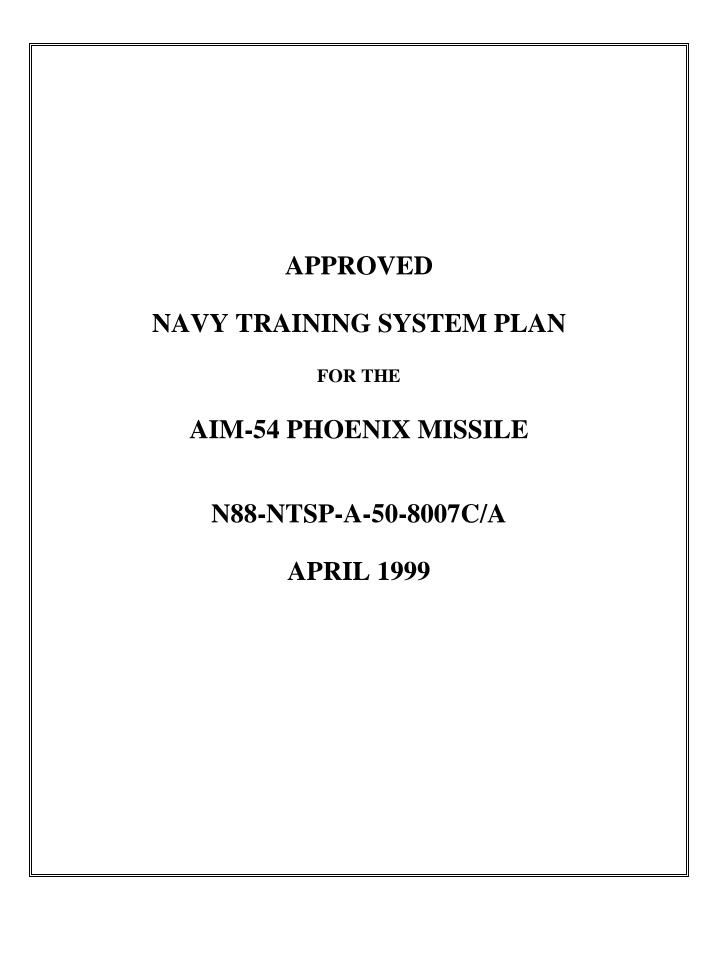
FT12 NAMTRAGRU (N2412) (3)

FT13 NATTC (Pensacola)

FT45 NAVSCOLEOD (Code 0134)

FT73 NETSAFA (Code N25)

FT78 NETPDTC



#### **AIM-54 PHOENIX MISSILE**

#### **EXECUTIVE SUMMARY**

The AIM-54 Phoenix Missile was developed in the 1970s as the principle long-range, air-to-air, defense armament of the F-14 Aircraft. The AIM-54 Phoenix Missile is a fielded weapon currently in Phase III, the Production, Fielding/Deployment, and Operational Support Phase of the Weapon System Acquisition Process. The AIM-54 Phoenix Missile is used exclusively on the F-14A/B/D Aircraft.

The AIM-54 Phoenix Missile is a radar guided, air-to-air missile consisting of a guidance section, armament section, propulsion section, control section, interconnecting surface cables, wings, and fins. The three versions of the AIM-54 Phoenix Missile currently being used are the AIM-54A, AIM-54C, and the AIM-54 Electronic Counter Counter-Measure (ECCM)/Sealed. Initial Operating Capability was attained in 1974 for the AIM-54A, 1986 for the AIM-54C, and 1988 for the AIM-54C ECCM/Sealed.

The AIM-54 Phoenix Missile maintenance concept is based on an overall objective to assure All-Up-Rounds are available to fulfill commitments of operational activities and provide the means to restore unserviceable missiles to serviceable condition with minimal downtime. Maintenance requirements are allocated to the organizational, intermediate, and depot levels of maintenance as defined in the Naval Airborne Weapons Maintenance Program, OPNAVINST 8600.2B. Workload associated with AIM-54 Phoenix Missile does not increase existing manning levels.

The AIM-54 Phoenix Missile training concept is divided into organizational and intermediate level. Organizational level training is provided to the operator and maintenance personnel. Operator training is provided to F-14 pilot and Naval Flight Officer personnel by VF-101, Naval Air Station (NAS) Oceana. Strike Weapons and Tactics School, Atlantic (SWATSLANT) NAS Oceana provides F-14 aircrew instruction on Phoenix employment and tactics prior to Carrier Air Wing deployment, and Naval Strike and Air Warfare Center (NSAWC) TOPGUN at NAS Fallon provides select F-14 aircrew instruction on Phoenix employment and tactics. Organizational level maintenance training is provided to Aviation Ordnanceman (AO) by Maintenance Training Unit (MTU) 1007, NAS Oceana and SWATSLANT, NAS Oceana. Intermediate level maintenance training is provided to AO personnel by MTU 4030, Naval Station Mayport; MTU 4032, NAS Norfolk; MTU 4033, NAS North Island; and MTU 4035, NAS Whidbey Island.

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#### LIST OF ACRONYMS

AEM Air Evaluation Missile

AIMD Aircraft Intermediate Maintenance Department
AMIST Aviation Maintenance In-Service Training

AMTCS Aviation Maintenance Training Continuum System

AO Aviation Ordnanceman
ATM Air Training Missile
AUR All-Up-Round

BIST Built-In Self Test

CAI Computer Aided Instruction

CAIMS Conventional Ammunition Integrated Management System

CANTRAC
CATM
Captive Air Training Missile
CBT
CEST
Catalog of Navy Training Courses
Captive Air Training Missile
Computer Based Training
Classroom EOD Systems Trainer

CIN Course Information Number

CINCLANTFLT Commander in Chief, Atlantic Fleet
CINCPACFLT Commander in Chief, Pacific Fleet
CMI Computer Managed Instruction

CNARF Commander, Naval Air Reserve Force
CNET Commander, Naval Education and Training

CNO Chief of Naval Operations

CWTPI Conventional Weapon Technical Proficiency Inspection

DA Developing Agency

DATM Dummy Air Training Missile
DEU Digital Electronics Unit
DOP Designated Overhaul Point

EA Electronic Assembly
EAG Extended Active Gate

ECCM Electronic Counter Counter-Measure

ECP Engineering Change Proposal
ECU Electrical Conversion Unit
EOD Explosive Ordnance Disposal

EODTEU Explosive Ordnance Disposal Training Evaluation Unit

ESCA Electronic Servo Control Amplifier

FOT&E Follow-On Test and Evaluation

FRS Fleet Replacement Squadron

GMTS Guided Missile Test Set

HAP High Altitude Performance

ICW Interactive Courseware

ILSP Integrated Logistics Support Plan

ISA Inertial Sensor Assembly IUT Instructor Under Training

M&P Manpower and Personnel MOAT Missile On Aircraft Test MSD Material Support Date

MTIP Maintenance Training Improvement Program

MTU Maintenance Training Unit

NA Not Applicable

NALC Navy Ammunition Logistics Code

NAMTRAGRU DET

Naval Air Maintenance Training Group Detachment

NAS Naval Air Station

NAVAIRSYSCOM
NAVEDTRA
NAVPERSCOM
Naval Air Systems Command
Naval Education and Training
NAVPERSCOM
Naval Personnel Command

NAVSCOLEOD Navy School, Explosive Ordnance Disposal

NEC Navy Enlisted Classification

NFO Naval Flight Officer
NS Naval Station

NSAWC Naval Strike and Air Warfare Center

NSD Navy Support Date

NSWC Naval Surface Warfare Center NTSP Navy Training System Plan NWS Naval Weapons Station

OATMS OPNAV Aviation Training Management System

OPEVAL Operational Evaluation

OPNAV Office of the Chief of Naval Operations

OPNAVINST Office of the Chief of Naval Operations Instructions

OPO OPNAV Principle Official

PEST Practical EOD Systems Trainer

RFT Ready For Training
RID Reject Image Device
RSP Render Safe Procedure

SELRES Selected Reserve

SFTI Strike Fighter Tactics Instructor
SFTP Strike Fighter Training Program
SFTS Strike Fighter Training System

SFWSL Strike Fighter Weapons School, Atlantic SFWSP Strike Fighter Weapons School, Pacific SFWT Strike Fighter Weapons and Tactics

SIST Serviceable In-Service Time SRA Shop Replaceable Assembly

SSRTU Solid-State Receiver-Transmitter Unit

SWATSLANT Strike Weapons And Tactics School, Atlantic

TA Training Agent
TD Training Device

TDD Target Detecting Device TECHEVAL Technical Evaluation

TMCR Technical Manual Control Requirements

TSA Training Support Agent

TTE Technical Training Equipment

WR Work Requests

WST Weapons System Trainer WTT Weapons Tactics Trainer

#### **PREFACE**

This Navy Training System Plan (NTSP) for the AIM-54 Phoenix Missile was prepared by the Naval Air Systems Command as part of the regular NTSP update process within the guidelines set forth in OPNAVINST 1500.76. This NTSP reflects the changes that have occurred since the previously approved Navy Training Plan, A-50-8007B for the AIM-54C Phoenix Missile dated September 1992.

The major changes and updates to this NTSP consist of:

- PART I This part shows the deletion of outdated information; incorporation of changes to formal training; updated Training Device (TD) allocation listings; identification of "A" School Core and Strand training and "C" School Initial and Career training; and deletion and relocation of training sites due to decisions made by the Base Realignment Commission.
- **PART II** This part has been recalculated to depict current billet requirements of fleet support units through FY03.
- **PART III** In addition to reflecting the changes mentioned above, this part has been recalculated to depict chargeable student billets through FY03.
- **PART IV** This part has been updated to reflect changes in training and training logistics support requirements.
- **PART V** No major changes.
- **PART VI** No major changes.
- **PART VII** This part has been updated to reflect current Points of Contact.

NTSP Number: N88-NTSP-A-50-8007C/A

Date: April 1999

## PART I - TECHNICAL PROGRAM DATA

## A. TITLE-NOMENCLATURE-PROGRAM

- 1. Title-Nomenclature-Acronym. Phoenix Missile, AIM-54
- 2. Program Element. 663321N.

## **B. SECURITY CLASSIFICATION**

1. System Characteristics	Secret
2. Capabilities	Secret
<b>3. Functions</b>	Unclassified

# C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor
OPO Resource Sponsor
Developing Agency (DA)
Training Agency (TA) CINCLANTFLT CINCPACFLT CNET(N-232/N-53) COMNAVAIRESFOR NSAWC (N7)
Training Support Agency (TSA)
Manpower and Personnel (M&P) Mission Sponsor
Commander, Reserve Program Manager
Director of Naval Training

#### D. SYSTEM DESCRIPTION

- 1. Operational Uses. The AIM-54 Phoenix Missile; hereafter referred to as the AIM-54A, AIM-54C, or AIM-54C Electronic Counter Counter-Measure (ECCM)/Sealed Missile when describing each specific configuration, or the Phoenix Missile when referring to all configurations, was developed as the principal long-range, air-to-air, defense armament of the F-14A/B/D aircraft. The combination of the Phoenix Missile and F-14 aircraft are a total weapon system that has the capability to launch up to six missiles against an equal number of targets at ranges sufficient to provide a first line of defense.
- **2. Foreign Military Sales.** Currently, there are no Foreign Military Sales of the Phoenix Missile.
- **E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** The AIM-54A Technical Evaluation (TECHEVAL) was completed in November 1973. Operational Evaluation (OPEVAL) was completed in November 1974. The AIM-54C TECHEVAL began in May 1982 and was completed in November 1982. The OPEVAL began in March 1983 and was completed in August 1983. AIM-54C ECCM/Sealed Missile TECHEVAL was completed in June 1985, and OPEVAL was completed in July 1988.
- **F.** AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. The AIM-54C ECCM/Sealed are replacing the AIM-54A and AIM-54C. As AIM-54A and AIM-54C inventories are depleted, they will not be replenished.

#### G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. The Phoenix Missile is a radar guided, air-to-air missile consisting of a guidance section, armament section, propulsion section, control section, interconnecting surface cables, wings, and fins. The missile is designed for ejection launch using the LAU-93 or LAU-132 launchers. Semi-active and active homing radar and hydraulically operated fins direct and stabilize the missile on course to the target. Propulsion is provided by a solid propellant rocket motor, and lethality by a high explosive warhead. Performance modifications to the AIM-54A were incorporated during and after production. The Reject Image Device (RID), High Altitude Performance (HAP), and Extended Active Gate (EAG) were incorporated during production. The MK 11 MOD 3 Electronics Assembly (EA) modification was installed by retrofit after production. The AIM-54C and AIM-54C ECCM/Sealed Missile have a Built-In Self-Test (BIST) feature. BIST may be selected in conjunction with Missile On Aircraft Test (MOAT). The AIM-54C ECCM/Sealed Missile provides two major improvements over the AIM-54C. They are: (1) ECCM provides enhanced electronic protection, and (2) sealing the

missile eliminates the requirement for aircraft supplied liquid thermal conditioning fluid during captive flight. Major modifications to each section of the different versions of the Phoenix Missile are described below.

#### a. Guidance Section

- (1) AIM-54A. The RID modification offers improved capabilities against low altitude targets over water. The EAG modification improves capabilities against certain Electronic Counter Measure (ECM) threats.
- (2) **AIM-54C.** The AIM-54C Guidance Section incorporates a new Solid-State Receiver-Transmitter Unit (SSRTU), Digital Electronics Unit (DEU), and Inertial Sensor Assembly (ISA) as well as a modified guidance section wiring harness. Design improvements reduce inherent oscillator drift, provide range discrimination, and improve reliability.
- (3) AIM-54 ECCM/Sealed Missile. The DEU front receiver has been modified and an improved version of the program memory has been added to enhance ECCM capabilities. Heaters have been added, operating temperatures of selected subassemblies have been increased, and circuit temperature compensation has been added for sealed operation. The SSRTU has been modified to improve ECCM performance, selected subassemblies have been improved to increase operating temperature ranges, circuit temperature compensation has been added for sealed operation, and the ISA has been modified to include a heater for sealed operation.

#### **b.** Armament Section

- (1) **AIM-54A.** The MK 11 MOD 3 EA modification upgrades the Target Detecting Device (TDD) to improve warhead lethality against short targets.
- (2) AIM-54C. The AIM-54C has a new TDD, the DSU-28, utilizing the MK 82 MOD 0 warhead. The MK 82 MOD 0 warhead is used with the DSU-28 on AIM-54C All-Up-Round (AUR), serial number 83001 through 83054. A new warhead, WDU-29/B was incorporated in the FY83 production of the AIM-54C AUR starting with serial number 83055. The new warhead offers a 20-25 percent increase in effectiveness.
- (3) AIM-54C ECCM/Sealed Missile. The AIM-54C ECCM/Sealed Missile uses the same armament section as the AIM-54C.
- **c. Propulsion Section.** The AIM-54A, AIM-54C, and AIM-54C ECCM/Sealed Missile use the MK 47 MOD 1 rocket motor assembly.

#### d. Control Section

- (1) **AIM-54A.** The HAP modification improves capabilities against very high and fast flying targets.
- (2) **AIM-54C.** The Electronic Servo Control Amplifier (ESCA) replaces the autopilot unit in the AIM-54A control section.
- (3) AIM-54 ECCM/Sealed Missile. The Electrical Conversion Unit (ECU) has been completely redesigned for sealed operations. The new design requires no heater for temperature regulation.
- **2. Physical Description.** The dimensions and weight of the Phoenix Missile are as follows:

Length	156 inches
Diameter	15 inches
Wing span	36 inches
Fin span	36 inches
Weight, AIM-54A	1000 pounds
Weight, AIM-54C	1020-1040 pounds
Weight AIM-54C ECCM/Sealed Missile	1023 pounds

**Note:** Weight varies with missile configuration.

- **3. Introduction.** The Phoenix Missile was introduced as new production. The AIM-54C was introduced to the fleet in August 1982 as an upgrade to the AIM-54A. The AIM-54C ECCM/Sealed Missile was introduced to the fleet in February 1985 as a configuration Engineering Change Proposal (ECP) to the AIM-54C.
- **4. Significant Interfaces.** The F-14A/B/D aircraft missile interface system consists of launchers, weapons rails, multi-purpose pylons, and Phoenix adapter assemblies. The launcher LAU-93 series is used to carry and launch the AIM-54A and AIM-54C from the F-14A/B. The launcher LAU-132 is used to carry and launch the AIM-54C ECCM/Sealed Missile from the F-14D.
  - **5.** New Features, Configurations, or Material. Not Applicable (NA).

#### H. CONCEPTS

- 1. Operational Concept. The Phoenix Missile is employed by F-14 aircrew during air-to-air combat missions, primarily against medium and long-range aerial threats. The F-14 aircraft can be configured with up to six Phoenix Missiles.
- **2. Maintenance Concept.** Maintenance of the Phoenix Missile employed on the F-14A/B and the F-14D aircraft is accomplished using the basic maintenance philosophy outlined in OPNAVINST 4790.2 (series), and specific weapons maintenance instructions outlined in OPNAVINST 8600.2 (series).
- **a. Organizational.** Organizational-level maintenance units receive the Phoenix Missile as an AUR. Work Center 230 manned by Navy Aviation Ordnanceman (AO) personnel with Navy Enlisted Classification (NEC) 8335 and 8835 (F-14D) or 8345 and 8845 (F-14A/B) perform organizational level maintenance. Phoenix Missile readiness can be verified on deck or in the air by the aircrew. Organizational-level maintenance tasks include:
  - Aircraft and weapon system inspections
  - Aircraft and weapon system release and control system checks
  - Weapon uploading and downloading
  - Weapon arming and de-arming
  - On aircraft weapon test
  - Discrepancy reporting
  - Complying with Technical Directives
  - Record keeping and reporting
- **b. Intermediate.** Intermediate Maintenance Activities' Weapons Departments (shipboard and Naval Air Stations) receive AURs from the Naval Weapons Station (NWS), and launchers from the supply system or Aircraft Intermediate Maintenance Department (AIMD). Phoenix Missile maintenance is performed by Weapons Department AO personnel with NEC 6801. Navy AO personnel with NEC 6802 functionally test the launchers at AIMD Work Center 710. Weapons Department intermediate-level maintenance tasks include:
  - Visually inspect for damage and corrosion
  - Perform corrosion control procedures
  - De-containerize and containerize AUR
  - Install and remove wings and fins
  - Ready service inspection
  - Record keeping and reporting
  - Prepare AUR for shipping or storage
  - Technical Directive implementation

- Deliver missile to organizational activity
- c. Depot. OPNAVINST 8600.2b divides depot-level maintenance into two sub-

Support Plan (ILSP) for the AIM-54 Phoenix Air-to-Air Guided Missile also divides depot-level maintenance into two sub-levels: AUR depot-level maintenance and depot-level maintenance.

NWS Seal Beach (Fallbrook Annex),

California, and NWS Yorktown, Virginia, are the AUR depot-level maintenance activities for the

NWS maintenance for forward-deployed assets. maintenance tasks include:

- Visual inspection for damage and corrosion
- Fault isolation by AUR test to faulty section
- Repair by replacement of failed sections and external components
- Perform corrosion control procedures
- Containerize AUR for storage or loadout Technical Directive implementation Recertification of AUR by retest Record keeping and reporting Minor container repair

#### (2) **Designated Overhaul Point.** The DOP is responsible for

beyond the capabilities of the NWS (depot level AUR) activities, including major overhaul or complete rebuild of sections or subassemblies

Shop Replaceable Assemblies (SRA) to original acceptance standards. DOP maintenance is performed on warheads, containers, wings, and fins at the

DOP maintenance is performed at NWS Seal Beach (Fallbrook Annex), California, and NWS Seal Beach, California. Guidance, control section, and internal sensor assembly DOP maintenance is Letterkenny Army Depot, Chambersburg, Pennsylvania. Rocket motor assembly and

(NSWC) Indian Head

Serviceable sections and components repaired by the DOP, are returned to

**d. Interim Maintenance.** The Phoenix Missile has achieved full organic support.

AIM-54C and AIM-54C ECCM/Sealed.

#### Life Cycle Maintenance Plan.

defines an interval during which a missile or missile component is in a serviceable condition. SIST

for AIM-54A is 18 months after testing at the NWS, and 24 months for the AIM-54C and AIM-54C ECCM/Sealed.

3. Manning Concept. The Phoenix Missile has no direct impact on existing manpower requirements at organizational, intermediate, or depot level activities. Pilot and Navy Flight Officer (NFO) manpower is driven by seat factor and crew ratio. Enlisted manning for fleet squadrons, Fleet Readiness Squadrons (FRS), and intermediate maintenance activities is based on the total assigned workload for air-launched weapons, not only on specific Phoenix Missile requirements. Skills required to support the Phoenix Missile are considered to be within the capability of existing NECs. Refer to Part II for existing intermediate maintenance manpower requirements.

The Navy Squadron Training Matrices (COMNAVAIRPACINST 3500.67C/ COMNAVAIRLANTINST 3500.63C) for the F-14 aircraft was used to estimate peacetime manpower requirements for the Phoenix Missile. These instructions provide annual aircrew training requirements, which include events that involve captive carry and live fire of ordnance. For F-14 squadrons, the only training events that involve the use of the Phoenix Missile or its associated Captive Air Training Missile (CATM) are event number 20, AIM-7/AIM-54 Live Shot, and event number 61, Low/Slow Intercept. For both events, the requirement is intended to provide radar missile qualification, and therefore, there is an option of using either an AIM-7 (Sparrow Missile) or a Phoenix Missile for the live shot, and either a Sparrow or Phoenix CATM for the low/slow intercept. The live shot is required once every three years per aircrewman, while the low/slow intercept is required nine times per year (three intercepts every 120 days) per aircrewman. Using a worst case of one sortie per low/slow intercept, and based on eighteen aircrewman per squadron, there is a possibility of 168 Phoenix Missile/CATM loadingdownloading cycles per F-14 squadron (162 low/slow intercept events plus 6 live shot events). Loading cycles include de-containerizing, transport, assembly, upload, download, disassembly, transport, and containerizing of the Phoenix Missile or CATM. Thus five F-14 AOs (NEC 8335, 8345, 8835, or 8845) and three Weapons Department AO 6801 are required to support annual Phoenix Missile/CATM loading cycles per F-14 squadron, even though only a portion of their workload will be driven by the Phoenix Missile.

**4. Training Concept.** The Phoenix Missile training concept is divided into organizational and intermediate-levels of maintenance based on OPNAVINST 8600.2 (series). Organizational-level training is provided to operator and maintenance personnel. Operator training is provided for F-14 pilot and NFO personnel. Organizational-level maintenance training is provided to AO personnel awarding NECs 8845, 8335, and 8345. Intermediate-level training is provided to AO personnel awarding NEC 6801.

A new training concept for most aviation maintenance training has been established. This concept entails dividing "A" School courses into two or more segments called core and strand, and C1 courses into separate initial and career training courses. "A" School Core courses

include general knowledge and skills training for the particular rating, while "A" School strand courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. Strand training immediately follows core training and is part of the "A" School. Upon completion of core and strand "A" School, graduates attend the appropriate initial "C" school for additional specific training. Initial "C" school training is intended for students with a paygrade of E-4 and below. Career "C" school training is provided to personnel E-5 and above to enhance their skills and knowledge within their field. Selected Reserve (SELRES) training is conducted by the Naval Air Reserve at each squadron site per current Commander, Naval Air Reserve Force (CNARF) instructions. The training is segmented and tailored for use by SELRES personnel during weekend drill periods and two-week active duty periods. If SELRES personnel and training quotas are available, CNARF must coordinate with appropriate quota controls to get training quotas at the FRS.

- **a. Initial Training.** All initial training has been completed. No further initial training is planned.
- **b. Follow-on Training.** Follow-on training for the Phoenix Missile is available as part of courses taught at Fleet Readiness Squadron (FRS), VF-101, Naval Air Station (NAS) Oceana, Virginia; Naval Strike and Air Warfare Center (NSAWC) N7 (Topgun); Strike Weapons And Tactics School, Atlantic (SWATSLANT), NAS Oceana; Maintenance Training Unit (MTU) 1007, Naval Air Maintenance Training Group Detachment (NAMTRAGRU DET), NAS Oceana, Virginia; MTU 4030, NAMTRAGRU DET, Naval Station (NS) Mayport, Florida; MTU 4032, NAMTRAGRU DET, NAS Norfolk, Virginia; and MTU 4033, NAMTRAGRU DET, NAS North Island, California, and MTU 4035, NAS Whidbey Island. Explosive Ordnance Disposal (EOD) training is available through Navy School, Explosive Ordnance Disposal (NAVSCOLEOD), Eglin Air Force Base, Florida. The Phoenix Missile causes no change in student throughput or chargeable student billets. Follow-on training courses have all been modified to include the updated AIM-54C ECCM/Sealed.
- (1) Operator Training. Pilots and NFOs are trained at VF-101 NAS Oceana for specific aircraft operation, tactic skills, and ordnance delivery. SWATSLANT and NSAWC N7 provide more in-depth training on the Phoenix Missile. Training Devices (TD) used for operator proficiency training include:
- Weapon Systems Trainer (WST). The F-14 community uses the WST 2F169 and WST 2F153, commonly referred to as "dome trainers", to simulate engagements and to practice weapons employment procedures and tactics. These TDs contain programmed Phoenix Missile scenarios, and are shared by the FRS and the operational squadrons that are shore-based between deployments.
- Captive Air Training Missile (CATM). The Phoenix CATM, designated as ATM-54A or ATM-54C are equivalent to tactical missiles in weight, balance, and

On-line

On-line

On-line

external appearance. A Phoenix CATM consists of functional guidance and control sections and inert armament and propulsion sections.

- Air Evaluation Missile (AEM). AEMs are telemetry-equipped missiles required for live firings in Follow-On Test and Evaluation (FOT&E), operational readiness evaluation, test and evaluation, and fleet readiness.
- Air Training Missile (ATM). ATMs are equivalent to tactical missiles in weight, balance, and external appearance. The ATM consists of a tactical guidance, control, and propulsion section. The armament section fuze, fuze booster, and explosive lead have been removed to prevent warhead detonation upon target intercept. ATMs function identical to tactical missiles and are used for live firings at airborne targets during fleet training exercises.

The following table lists the applicable operator training courses. The Phoenix Missile source material has been incorporated in these courses with minimal impact. The Phoenix Missile causes no change in student throughput or chargeable student billets, and, therefore, these courses will not appear in Parts II and III. For complete course listings, please refer to NTP A-50-8511A.

COURSE **RFT DATE FOR NUMBER PHOENIX COURSE TITLE** D-2A-1601 F-14 Pilot Category 1 On-line F-14 Pilot Category 2 D-2A-1602 On-line D-2A-1603 F-14 Pilot Category 3 On-line D-2A-1604 F-14 Pilot Category 4 On-line F-14 Pilot Instructor Under Training (IUT) Category 5 D-2A-1605 On-line D-2D-1601 F-14 Naval Flight Officer Category 1 On-line F-14 Naval Flight Officer Category 2 D-2D-1602 On-line F-14 Naval Flight Officer Category 3 On-line D-2D-1603 F-14 Naval Flight Officer Category 4 D-2D-1604 On-line F-14 Naval Flight Officer (IUT) Category 5 D-2D-1605 On-line F-14D Category 1 Replacement Pilot D-2A-1631 On-line F-14D Category 2 Replacement Pilot D-2A-1634 On-line F-14D Category 3 Replacement Pilot D-2A-1637 On-line F-14D Category 4 Replacement Pilot D-2A-1640 On-line D-2D-1631 F-14D Naval Flight Officer Category 1 On-line F-14D Naval Flight Officer Category 2 D-2D-1634 On-line D-2D-1637 F-14D Naval Flight Officer Category 3 On-line

**Table I-1 Operator Courses** 

(2) Initial Skills - Maintenance. Initial skills training for the AO A1 School at NAS Pensacola, Florida, provides the Aviation Ordnanceman rating. The following

F-14D Naval Flight Officer Category 4

F-14 Strike Fighter Weapons Employment

F-14 Strike Fighter Advanced Readiness Program

D-2D-1640

None

None

table lists the applicable initial skill courses for the AO rating. Phoenix source material has been incorporated in these courses with minimal impact. This caused no change in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II and III.

Table I-2 Initial Skills - Maintenance Courses

COURSE NUMBER	COURSE TITLE	RFT DATE FOR PHOENIX
C-646-2011	Aviation Ordnanceman Common Core Class A1	On-line
C-646-2012	Aviation Ordnanceman Airwing Strand Class A1	On-line
C-646-2013	Aviation Ordnanceman Ship's Company Strand Class A1	On-line

(3) **Organizational Maintenance.** Organizational-level maintenance personnel are trained at the appropriate MTU for specific aircraft maintenance. Weapon loading skills are further enhanced at SWATSLANT and through on-board proficiency training. TDs for Phoenix organizational-level maintenance training include:

• **Dummy Air Training Missile (DATM)-54A.** The DATM-54A is an inert, replica of the Phoenix Missile, which adequately satisfies the organizational-level training requirements for the Phoenix Missile. It facilitates instruction and familiarization of Phoenix Missile handling, loading, and visual inspection procedures for organizational-level maintenance training purposes. The DATM-54A is not certified for flight and is designed for ground training use only. Phoenix CATMs are suitable replacements for the Phoenix DATM-54A. For detailed information on TDs refer to element IV.A.2.

The following table lists the applicable organizational-level maintenance training courses. Phoenix Missile source material has been incorporated in these courses with minimal impact. This caused no change in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II and III. For complete course listings, please refer to NTP A-50-8511A.

**Table I-3 Organizational-Level Maintenance Courses** 

COURSE NUMBER	COURSE TITLE	RFT DATE FOR PHOENIX
C-646-9962	F-14A/B Armament Systems Initial Organizational Maintenance	On-line
C-646-9963	F-14A/B Armament Systems Career Organizational Maintenance	On-line
D-646-9906	F-14D Armament Systems Organizational Maintenance (Difference)	On-line
D-646-1644	F-14A/B Conventional Weapons Loading Team	On-line
D-646-1645	F-14A/B Integrated Weapons Team Training	On-line
D-646-1646	F-14D Conventional Weapons Loading	On-line
D-646-1648	F-14D Integrated Weapons Team Training	On-line

(4) Intermediate Maintenance. Intermediate-level maintenance personnel are trained at the appropriate MTU for specific weapon maintenance. TDs for Phoenix intermediate-level maintenance training include:

• **DATM-54A.** The Phoenix DATM-54A satisfies the intermediate-level training requirements for the Phoenix Missile. It facilitates instruction and familiarization of Phoenix Missile de-containerizing, handling, transporting, and visual inspection procedures for intermediate-level maintenance training purposes. The DATM-54A is not certified for flight and is designed for ground training use only. The Phoenix CATMs are suitable replacements for the DATM-54A. For detailed information on TDs refer to element IV.A.2.

The following table lists intermediate-level maintenance training courses that had Phoenix Missile source material incorporated with minimal impact. These updates caused no change in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II and III.

Table I-4 Intermediate-Level Maintenance Courses

COURSE NUMBER	COURSE TITLE	RFT DATE FOR AIM-7M/P
C-646-4108	Air Launched Weapons Ordnance Supervisor	On-line
C-646-4109	Weapons Department General Ordnance	On-line

The following courses were updated to include Phoenix Missile data, but course lengths were not affected.

Title	Air Launched Guided Missiles Intermediate Maintenance	
•••••		
CIN	C-122-3111A (part of D/E-646-7007)	
Model Manager	MTU 4030, NAMTRAGRU DET, Naval Station (NS)	
	Mayport	
Description	From Catalog of Navy Training Courses (CANTRAC): To	
	provide ordnance personnel with knowledge of the Sparrow,	
	Sidewinder, Phoenix, Sidearm, AMRAAM, Maverick,	
	Harpoon, SLAM, HARM, Walleye, TALD, and Air Nitrogen	
	Purifier Units.	
Locations	MTU 4030, NAMTRAGRU DET, NS Mayport	
	MTU 4032, NAMTRAGRU DET, NAS Norfolk	
	MTU 4033, NAMTRAGRU DET, NAS North Island	
	MTU 4035, NAMTRAGRU DET, Whidbey Island	
Length	11 days	
RFT date	Currently available	
Skill identifier	AO 6801	
TTE/TD	CNU-242A/E, ADU-399A/E, ADU-406/E, MHU-129/E,	
	ADU-433A/E, ADU-434A/E, DATM-54A	
Prerequisite	C-646-2013 Aviation Ordnanceman Ship's Company Strand	
-	Class A1	

(5) Explosive Ordnance Disposal Training. EOD training is conducted at NSWC Indian Head Division, Maryland. The TDs required for EOD training are the Practical Explosive Ordnance Disposal System Trainer (PEST) and the Classroom Explosive System Trainer (CEST), however, salvaged of inert tactical missiles and/or components and CATMs are used in their place, as Phoenix PEST and CEST were never developed nor procured. Phoenix CATMs do not contain the safe and arm components required for teaching practical application of Render Safe Procedures (RSP):

## • Practical Explosive Ordnance Disposal System Trainer (PEST).

The basic performance requirements for a PEST are: 1) to replicate the external features of tactical missile for visual identification purposes; 2) to possess the same weight and center of gravity as the tactical missile for handling realism; 3) to contain inert explosive train components; and 4) to disassemble identically to the tactical missile (where applicable) in order to practice RSPs. A Phoenix PEST was never developed nor procured, however, practical training requirements for the Phoenix Missile are currently met through the use of salvaged inert tactical missiles and/or components and CATMs.

• Classroom Explosive System Trainer (CEST). The basic performance requirements for a CEST are: 1) to replicate the external features of tactical missile

for visual identification purposes; 2) to contain inert explosive train components; and 3) to provide cut-away areas in its exterior in order to view the inert explosive train components for teaching RSPs. A Phoenix CEST was never developed nor procured; however, classroom training requirements for Phoenix Missile are currently supported through the use of salvaged inert tactical missiles and/or components and CATMs that have been modified (cut-away) to view internal, inert explosive components. For detailed information on TDs refer to element IV.A.2.

The following table lists the applicable EOD training courses. Phoenix Missile source material has been incorporated in these courses with minimal impact. This caused no change in student throughput or chargeable student billets; therefore, these courses will not appear in Parts II and III.

COURSE NUMBER	COURSE TITLE	RFT DATE FOR PHOENIX
A-431-0011	Explosive Ordnance Disposal (EOD) Phase II (Navy)	On-line
A-431-0012	Explosive Ordnance Disposal (EOD) Phase II	On-line
G-431-0001	FOD Pre-deployment Team Training	On-line

**Table I-5 Explosive Ordnance Disposal Courses** 

**c. Student Profiles.** The following enlisted manpower and personnel classifications are required to support the Phoenix Missile. In many instances, AO personnel who support the Phoenix Missile do not possess the component NEC because they attained their primary NEC prior to the recent A School and C School changes.

Table	16	Phoeniy	Miccilo	Student	Drofiles
Ianie	I-n	Phophiy	MICCHA	STUDENT	Pratile

RATING and NEC or MOS	TITLE	COMPONENT NEC or MOS
AO 8835	F-14D Armament System Organizational Apprentice Maintenance Technician	AO 0000
AO 8335	F-14D System Organizational Maintenance Technician	AO 8835
AO 8845	F-14 Armament System Organizational Apprentice Maintenance Technician	AO 0000
AO 8345	F-14A/B System Organizational Maintenance Technician	AO 8845
AO 6801	Air Launched Weapons Technician	AO 0000

I-13

**d. Training Pipelines.** The following training pipelines and tracks correspond to student profiles listed above. These pipelines and tracks are based on the training system that is in place today, and may not reflect actual progressions for personnel who completed formal training prior to the recent A School and C School changes. Shaded courses were affected by introduction of the AIM-54C ECCM/Sealed. Training tracks and associated courses are available in the OPNAV Aviation Training Management System (OATMS).

AO 0000	→ AO 8845	$\rightarrow$	AO 8335
Aviation Ordnanceman Class A1	F-14 Armament Systems Organizational Apprentice Maintenance Technician		F-14D Systems Organizational Maintenance Technician
Airwing Strand	TRACK D-646-1647		TRACK D-646-1640
C-646-2011	C-600-3601		C-600-3601
C-646-2012	C-646-9962		C-646-9963
	D-646-1644		C-646-9906

Figure I-1 F-14D Systems Organizational Maintenance Technician Career Progression

AO 0000	$\rightarrow$	AO 8845	$\rightarrow$	AO 8345
Aviation		F-14 Armament Systems		F-14A/B Systems Organizational
Ordnanceman		Organizational Apprentice		Maintenance Technician
Class A1		Maintenance Technician		
Airwing Strand		TRACK D-646-1647		TRACK D-646-1641
C-646-2011		C-600-3601		C-600-3601
C-646-2012		C-646-9962		C-646-9963
		D-646-1644		

Figure I-2 F-14A/B Systems Organizational Maintenance Technician Career Progression

AO 0000	AO 6801
Aviation	Air Launched
Ordnanceman	Weapons Technician
Class A1	(Intermediate)
Ship's Company Strand	TRACK D/E-646-7007
C-646-2011	C-600-3601
C-646-2013	C-122-3111
	C-122-3113
	C-646-4106
	C-646-4109

Figure I-3 Air Launched Weapons Technician Career Progression

#### I. ON-BOARD (IN-SERVICE) TRAINING

## 1. Proficiency or Other Organic Training.

a. Maintenance Training Improvement Program. The Maintenance Training Improvement Program (MTIP) is an effective and efficient training system that is responsive to fleet training requirements. It consists of a bank of test questions that are managed through automated data processing. The Deputy Chief of Staff for Training assists in the development of MTIP by providing those question banks (software) already developed by the Navy. MTIP is implemented per OPNAVINST 4790.2F. MTIP is a training management tool that, through diagnostic testing, identifies individual training deficiencies at both the organizational- and intermediate-levels of maintenance. MTIP allows increased effectiveness in the application of training resources through identification of skill and knowledge deficiencies at the activity, work center, or individual technician level. Remedial training is concentrated where needed to combat identified skill and knowledge shortfalls.

b. Aviation Maintenance In-Service Training. Aviation Maintenance In-Service Training (AMIST) is intended to support Fleet training requirements now satisfied by MTIP and in that sense is the planned replacement. However, it is structured very differently and will function as an integral part of the new Aviation Maintenance Training Continuum System (AMTCS) that will replace the existing aviation maintenance training structure. AMIST will provide standardized instruction to bridge the training gaps between initial and career training. With the implementation of AMIST, the technician will be provided the training required to maintain a level of proficiency necessary to perform effectively the required tasks to reflect a career progression. AMTCS redesigns the aviation training process (training continuum), and introduces Computer Based Training (CBT) throughout the Navy technical training process. The application and adoption of recent advances in computer hardware and software technology have enabled

CBT with its basic elements of Computer Managed Instruction (CMI), Computer Aided Instruction (CAI), and Interactive Courseware (ICW) to be integrated into the training continuum and provide essential support for standardizing technical training.

- c. Strike Fighter Training Program (SFTP). NSAWC N7 (Topgun), SFWSL, SFWSP, and SWATSLANT, are developing post-FRS training at the squadron level for Navy Strike Fighter aircraft (F-14 and F/A-18). This post-FRS training continuum is known as the SFTP and is composed of three equally critical elements: the Strike Fighter Weapons and Tactics (SFWT) curricula, the Strike Fighter Tactics Instructor (SFTI), and the Strike Fighter Training System (SFTS). The SFWT curricula will be taught by each squadron's SFTI, who will be supported by the SFTS, a multimedia computer-based training system that will host CMI, CAI, CBT and ICW. Aircrew weapons proficiency training will continue to be accomplished using existing methods: Academic, Simulator (WTT/ WST), CATM and/or embedded aircraft simulation, and live missile shots supported by the Non-Combat Expenditure Allowance. However, capability ratings will be based on performance rather than completion, i.e., it will not be based simply upon completing the training events, but upon how well they are completed. Training events will be measured using defined metrics, and collectively these events will be evaluated to determine actual combat readiness, quantitatively (objectively) rather than qualitatively (subjectively).
  - **2. Personnel Qualification Standards.** Not Applicable (NA).
  - 3. Other On-Board or In-service Training Packages.
- **a.** Conventional Weapon Technical Proficiency Inspection. The Conventional Weapon Technical Proficiency Inspection (CWTPI) is a graded inspection administered by either SFWSP, SFWSL, or SWATSLANT. The CWTPI covers all areas of conventional weapon load and release, and control systems checks. The inspection evaluates the squadron's ability to wirecheck, upload and download conventional ordnance, use applicable publications, and place ordnance on its designated target. The squadron inspection is conducted annually, six months prior to deployment, or at the request of the squadron's Commanding Officer. All personnel directly involved in the inspection, including squadron pilots require a written examination. A 72 hour time limit is granted for the completion of the entire evolution. The final grade is an average score derived from the written exams, ordnance loads, wire checks, and the pilot's proficiency to deliver weapons on target. Pre-inspection training is provided by the appropriate SFWS followed by the CWTPI. The CWTPI determines the need for further conventional weapons load training of squadron AO and Aviation Electronics Technician personnel at the appropriate school.

#### J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers.

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N00019-89-C-0079 N00019-90-C-0069	Hughes Aircraft Co.	Tucson, Arizona
N00019-89-C-0112	Raytheon	Lowell, Massachusetts

- **2. Program Documentation.** The current ILSP is ILSP No. MS-027, approved October 1993.
- **3. Technical Data Plan.** Navy technical publication requirements are identified in Technical Manual Control Requirements (TMCR) and Work Requests (WR) issued by the Naval Air Technical Data and Engineering Command. Each TMCR and WR identifies the required technical manuals or technical source data to be furnished, the general and detailed technical content, and the preparation specifications. NA-01-AIM54-0 lists all technical manuals required for the AIM-54A, AIM-54C and AIM-54C ECCM/Sealed Missiles. Manuals required for training are currently available and listed in element IV.B.3 of this NTSP.

## 4. Test Sets, Tools, and Test Equipment

**a. Test Sets.** The AN/DSM-130 Guided Missile Test Set (GMTS), used at the NWS for testing the AUR, is an integrated test set designed for computer controlled testing of the AIM-54A, AIM-54C, and AIM-54C ECCM/Sealed.

DOP depot-level test sets have been delivered. AIM-54A depot level test sets were modified for use with the AIM-54C and AIM-54C ECCM/Sealed Missile configuration testing. The following test sets and stations were modified:

- Unit/Assembly Test Station 1046245
- Flexible Automatic Circuit Tester 1046290
- Guidance Section Test Station N089122-4
- Control Section Test Station N089122-5

Letterkenny Army Depot, Chambersburg, Pennsylvania, test station requirements for the AIM-54C and AIM-54C ECCM/Sealed Missile configurations are:

- DEU Test Station 1351200
- Front/Rear Receiver Test Station 1128620
- Digital Chassis Test Station 1351500
- ISA Test Station 1351951

- Receiver-Transmitter Test Station 1352000
- Programmable Read-Only Memory Test Station 1046240
- Hybrid Test Station (analog) 1351600
- Hybrid Test Station (digital) 1351800

AIM-54A test stations that do not support the AIM-54C and AIM-54C ECCM/Sealed Missile will no longer be required when AIM-54A inventories are depleted.

- **b. Tools.** The Phoenix Missile did not introduce any new peculiar tools.
- **c. Other Support Equipment.** The following table lists the Phoenix Missile peculiar support equipment.

**Table I-7 Phoenix Peculiar Support Equipment** 

EQUIPMENT	DESIGNATOR or PART	USE						
	NUMBER							
Container, AUR	CNU-242A/E	Shipping/storage of 2 AURs						
Adapter, guided missile	ADU-399A/E	Adapting missile to skids and trailers for						
		transport						
Adapter, trailer	ADU-406/E	Adapting missile to trailer for transport						
Beam, hoisting	MHU-129/E	Adapting missile to hook lift devices						
Height adapter (aft)	ADU-433A/E	Adapting missile to trailer for transport						
Height adapter (forward)	ADU-434A/E	Adapting missile to trailer for transport						

- **5. Repair Parts.** The Material Support Date (MSD) for the AIM-54A was achieved April 1975, and the MSD for the AIM-54C and AIM-54 ECCM/Sealed was achieved August 1986. Repair parts are available through the Navy supply system. Normal replenishment procedures based upon demand and usage are used to maintain stock levels of spares, repair parts, and consumables.
  - **6. Human Systems Integration.** NA.

## K. SCHEDULES

**1. Schedule of Events.** The AIM-54A attained initial operational capability in 1974 as the principal long-range defense armament of the F-14 Aircraft. Approximately 2,500 production AIM-54A missiles were delivered between 1972 and October 1980.

The AIM-54C missile attained initial operational capability in December 1986. Approximately 300 production AIM-54C missile were delivered between August 1982 August 1986.

The AIM-54C ECCM/Sealed attained initial operational capability in 1988. Approximately 1900 production AIM-54C ECCM/Sealed Missiles were delivered between February 1986 and September 1992. All fleet deliveries are complete. NSD was attained in September 1991. All training activities are currently Ready For Training (RFT).

- a. Installation and Delivery Schedules. Phoenix Missile schedules are classified and are contained in the Weapon Systems Planning Document for the Phoenix Missile, NAVAIRNOTE C13100 of 5 January 1996.
- **b.** Ready For Operational Use Schedule. The Phoenix Missile is currently considered to be ready for operational use.
- **c. Time Required to Install at Operational Sites.** The Phoenix Missile is delivered as an AUR.
  - d. Foreign Military Sales and Other Source Delivery Schedule. NA.
- **e.** Training Device and Delivery Schedule. One hundred twenty-two CATMs and 23 DATMs have been delivered to the fleet. For the most up-to-date list of the location of the TDs, a current listing from Conventional Ammunition Integrated Management System (CAIMS) should be obtained. Element IV.A.2 of this NTSP contains information on locations of TDs.

# L. GOVERNMENT FURNISHED EQUIPMENT AND CONTRACTOR FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

#### M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

Table I-8 Related NTSPs and Other Applicable Documents

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
F-14 A/B/D Aircraft	N88-NTSP-A-50-8511B/D	PMA205	Draft August 1998
Phoenix Missile System ILSP	MS-027	AIR-4101L2	Approved October 1993
Phoenix Operational Logistics Support Plan	MS-020	AIR-4181C2	Approved January 1989

#### PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the AIM-54; therefore, they are not included in Part II of this NTSP:

- II.A. Billet Requirements
  - II.A.2. Operational and Fleet Support Activity Deactivation Schedule
- II.B. Personnel Requirements
  - II.B.3. Foreign, Other Service, and Non-Military Personnel Annual Training Input Requirement

**NOTE 1:** This section of the AIM-54 NTSP reflects maintenance billet and personnel requirements for the AIM-54. It is a compilation of two organizational and one intermediate level NEC (AO 8335, AO 8345 and AO 6801, respectively) with associated billets. The AIM-54 impacts only a small percentage of the required workload for those NECs, which are not dedicated to the AIM-54.

**NOTE 2:** All billets identified in this section are programmed through other NTSPs, e.g., F-14 NTSP, applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Documents. The activities and associated billets are listed to assist the weapons training community in identifying and managing training requirements throughout the development, production, and deployment of the AIM-54.

## PART II - BILLET AND PERSONNEL REQUIREMENTS

## **II.A. BILLET REQUIREMENTS**

# II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: NAVAIRSYSCOM PMA259/PMA205 DATE: 11/97

ACTIVITY	UIC	PFYs	CFY98	FY99	FY00	FY01	FY02
OPERATIONAL	NAVY						
NAVWPNTESTRON CL	39787	1	0	0	0	0	0
NAVWPNTESTRON PM	39788	1	0	0	0	0	0
NAVSTKAIRTESTRON	39783	1	0	0	0	0	0
VX-9	55646	1	0	0	0	0	0
VF-101	09067	1	0	0	0	0	0
VF-14	09084	1	0	0	0	0	0
VF-32	09053	1	0	0	0	0	0
VF-41	09774	1	0	0	0	0	0
VF-154	09678	1	0	0	0	0	0
VF-211	09086	1	0	0	0	0	0
VF-213	09934	1	0	0	0	0	0
VF-102	09717	1	0	0	0	0	0
VF-103	09718	1	0	0	0	0	0
VF-2	09113	1	0	0	0	0	0
VF-11	09560	1	0	0	0	0	0
VF-31	09473	1	0	0	0	0	0
VF-143	09281	1	0	0	0	0	0
VF-201	09309	1	0	0	0	0	0
NSAWC N7	69190	1	0	0	0	0	0
SWATSLANT	47157	1	0	0	0	0	0
VFC-12	52994	1	0	0	0	0	0
VFC-13	52995	1	0	0	0	0	0
TOTAL:		22	0	0	0	0	0
FLEET SUPPORT	NAVY						
AIMD Dallas	00215	1	0	0	0	0	0
AIMD Fallon	60495	1	0	0	0	0	0
AIMD Oceana	60191	1	0	0	0	0	0
CV-63 USS Kitty Hawk	03363	1	0	0	0	0	0
CV-64 USS Constellation	03364	1	0	0	0	0	0
CVN-65 USS Enterprise	03365	1	0	0	0	0	0
CV-67 USS Kennedy	03367	1	0	0	0	0	0
CVN-68 USS Nimitz	03368	1	0	0	0	0	0
CVN-69 USS Eisenhower	03369	1	0	0	0	0	0
CVN-70 USS Vinson	20993	1	0	0	0	0	0
CVN-71 USS Roosevelt	21247	1	0	0	0	0	0
CVN-72 USS Lincoln	21297	1	0	0	0	0	0
CVN-73 USS Washington	21412	1	0	0	0	0	0
CVN-74 USS Stennis	21847	1	0	0	0	0	0
CVN-75 USS Truman	21853	1	0	0	0	0	0
NAWMU-1	52821	1	0	0	0	0	0
NAWCAD Patuxent River	00421	1	0	0	0	0	0
NAWCWD Point Mugu	63126	1	0	0	0	0	0
NAWS Point Mugu	0429A	1	0	0	0	0	0
NAWS China Lake	68937	1	0	0	0	0	0
TOTAL:		20	0	0	0	0	0
			II o				

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES<sup>1</sup>

NAVY	ACTIVITY		UIC	PHASING INCR.	BILL OFF		DESIGN RATING	PNEC/SNEC PMOS/SMOS
ACDU ACDU 0 5 AO 8811  ACTIVITY TOTAL: 0 8  NAVWPNTESTRON PM ACDU ACDU 0 5 AO 8445  ACTIVITY TOTAL: 0 8  NAVSTKAIRTESTRON 39783  ACDU ACDU 0 5 AO 8445  NAVSTKAIRTESTRON 39783  ACDU ACDU 0 5 AO 8445  ACDU ACDU 0 5 AO 8445  ACDU 0 5 AO 8445  ACDU 0 5 AO 845  VX-9 55646  ACDU 0 5 AO 845  VX-9 55646  ACDU 0 5 AO 845  VF-101 09067  ACDU 0 5 AO 845  VF-141 09084  VF-32 09053  VF-41 09074  VF-154 ACDU 0 5 AO 8345  VF-211 09086  VF-211 09086  VF-213 ACDU 0 5 AO 8345  VF-102 09717  ACDU 0 5 AO 8345  VF-103 09718  VF-103 09718  VF-104 ACDU 0 5 AO 8345  VF-105 ACDU 0 5 AO 8345  VF-107 ACDU 0 5 AO 8345  VF-108 ACDU 0 5 AO 8345  VF-10986  VF-109971 ACDU 0 5 AO 8345  VF-100 ACDU 0 5 AO 8345  VF-101 ACDU 0 5 AO 8345  VF-102 ACDU 0 5 AO 8345  VF-103 ACDU 0 5 AO 8345  VF-104 ACDU 0 5 AO 8345  VF-105 ACDU 0 5 AO 8345  VF-107 ACDU 0 5 AO 8345  VF-108 ACDU 0 5 AO 8345  VF-109717 ACDU 0 5 AO 8345  VF-109718 ACDU 0 5 AO 8335  VF-11 ACDU 0 5 AO 8335	OPERATIONAL		NAVY					
NAVWPNTESTRON PM	NAVWPNTESTRON	ACDU	39787					
ACDU ACDU 0 5 AO 8345  ACTIVITY TOTAL: 0 8  NAVSTKAIRTESTRON 39783  ACDU ACDU 0 5 AO 8345  ACTIVITY TOTAL: 0 8  VX-9 55646  ACDU ACDU 0 5 AO 8345  ACTIVITY TOTAL: 0 8  VF-101 09067  ACDU 0 5 AO 8345  VF-14 09084  ACDU 0 5 AO 8345  VF-213 09078  ACDU 0 5 AO 8345  VF-213 09934  VF-213 09934  VF-102 09934  ACDU 0 5 AO 8345  VF-103 09934  VF-100 09086  ACDU 0 5 AO 8345  VF-110 09086  ACDU 0 5 AO 8345  VF-110 09086  ACDU 0 5 AO 8345  VF-110 09934  VF-110 09934  VF-110 09086  ACDU 0 5 AO 8345  VF-211 09934  VF-102 09717  ACDU 0 5 AO 8345  VF-103 09934  VF-103 09934  VF-104 09934  VF-105 ACDU 0 5 AO 8345  VF-107 ACDU 0 5 AO 8345  VF-108 09934  VF-109 09934  ACDU 0 5 AO 8345  VF-109 09934  ACDU 0 5 AO 8345  VF-101 09934  VF-102 09934  ACDU 0 5 AO 8345  VF-103 09934  VF-104 09934  VF-105 ACDU 0 5 AO 8345  VF-107 ACDU 0 5 AO 8345  VF-108 09913  VF-110 09560  VF-111 09560  VF-111 09960  VF-111 09981  ACDU 0 5 AO 8335	ACTIVITY TOTA						7.10	0010
NAVSTKAIRTESTRON   ACDU   AC		ACDU ACDU	39788		0	5		
ACDU ACDU 0 5 AO 8345  ACTIVITY TOTAL: 0 8  VX-9 55646  ACDU ACDU 0 5 AO 8345   VF-101 09067  VF-11 09074  ACDU 0 5 AO 8345  VF-211 09086  VF-213 ACDU 09084  VF-102 09717  ACDU 09718  ACDU 09719  ACDU 09710  ACDU 09711  ACDU 0 5 AO 8335  VF-111  O9281  ACDU 0 5 AO 8335			39783		U	U		
VX-9		ACDU ACDU			0	5		
ACDU ACDU 0 5 AO 8345  ACTIVITY TOTAL: 0 8  VF-101 09067  VF-14 09084  ACDU 0 5 AO 8345  VF-32 09053  ACDU 0 5 AO 8345  VF-41 09774  ACDU 0 5 AO 8345  VF-154 09678  VF-211 09086  ACDU 0 5 AO 8345  VF-213 09934  VF-102 09717  ACDU 0 5 AO 8345  VF-103 09718  VF-103 09718  VF-103 09718  VF-103 ACDU 0 5 AO 8345  VF-11 09086  ACDU 0 5 AO 8345  VF-103 09718  VF-103 09718  ACDU 0 5 AO 8345  VF-103 09718  VF-103 09718  ACDU 0 5 AO 8345  VF-103 09718  VF-104 0 5 AO 8345  VF-105 09718  ACDU 0 5 AO 8345  VF-11 09560  ACDU 0 5 AO 8335  VF-31 09473  VF-31 09473  VF-143 09281		AL:	FF/4/		0	8		
VF-101       09067       0       5       AO       8345         VF-14       09084       0       5       AO       8345         VF-32       09053       0       5       AO       8345         VF-41       09774       0       5       AO       8345         VF-154       09678       0       5       AO       8345         VF-211       09086       0       5       AO       8345         VF-213       09934       0       5       AO       8345         VF-102       09717       0       5       AO       8345         VF-103       09718       0       5       AO       8345         VF-2       09113       0       5       AO       8345         VF-11       09560       0       5       AO       8335         VF-31       ACDU       09473       0       5       AO       8335         VF-143       ACDU       0       5       AO       8335	VX-9		55040					
VF-14		AL:			0	8		
VF-32  VF-41  ACDU  O9053  VF-41  ACDU  O9774  ACDU  O9678  ACDU  O9086  ACDU  VF-213  VF-102  ACDU  ACDU  O9717  ACDU  O9718  ACDU  VF-103  ACDU  ACDU  O9718  ACDU  O9718  ACDU  O95  ACDU  O9718  ACDU  O950  ACDU  O950  ACDU  O950  ACDU  O950  ACDU  O950  ACDU  O9600  ACDU  O9743  ACDU  O99281  ACDU  O 5 AO  S335  VF-143  ACDU  O9281  ACDU  O 5 AO  S335		ACDU			0	5	AO	8345
VF-41       ACDU       0       5       AO       8345         VF-154       ACDU       09678       0       5       AO       8345         VF-211       09086       0       5       AO       8345         VF-213       ACDU       09934       0       5       AO       8345         VF-102       ACDU       09717       0       5       AO       8345         VF-103       ACDU       09718       0       5       AO       8345         VF-2       09113       0       5       AO       8335         VF-11       ACDU       09560       0       5       AO       8335         VF-31       ACDU       09473       0       5       AO       8335         VF-143       ACDU       09281       0       5       AO       8335		ACDU			0	5	AO	8345
VF-154       ACDU       0       5       AO       8345         VF-211       09086       0       5       AO       8345         VF-213       09934       0       5       AO       8345         VF-102       09717       0       5       AO       8345         VF-103       09718       0       5       AO       8345         VF-2       09113       0       5       AO       8345         VF-11       09560       0       5       AO       8335         VF-31       ACDU       0       5       AO       8335         VF-143       ACDU       0       5       AO       8335		ACDU			0	5	AO	8345
VF-211 09086 ACDU 09086 ACDU 09934 VF-213 09934 ACDU 09717 ACDU 09718 ACDU 09718 ACDU 09113 ACDU 09560 ACDU 09560 ACDU 09473 ACDU 09281 ACDU 0 5 AO 8335 VF-143 ACDU 09281 ACDU 0 5 AO 8335		ACDU			0	5	AO	8345
VF-213		ACDU			0	5	AO	8345
VF-102  ACDU  O9717  ACDU  O9718  ACDU  O99113  ACDU  O95  ACDU  O95  AO  8345  VF-2  O9113  ACDU  O95  ACDU  O9560  ACDU  O9473  ACDU  O9281  ACDU  O 5 AO  8335  VF-143  ACDU  O 5 AO  8335	VF-213	ACDU	09934		0	5	AO	8345
VF-103 09718 ACDU 0 5 AO 8345 VF-2 09113 ACDU 0 5 AO 8335 VF-11 09560 ACDU 0 5 AO 8335 VF-31 09473 ACDU 0 5 AO 8335 VF-143 09281 ACDU 0 5 AO 8335		ACDU			0	5	AO	8345
VF-2 09113 ACDU 0 5 AO 8335 VF-11 09560 ACDU 0 5 AO 8335 VF-31 09473 ACDU 0 5 AO 8335 VF-143 09281 ACDU 0 5 AO 8335		ACDU			0	5	AO	8345
VF-11 09560 ACDU 0 5 AO 8335 VF-31 09473 ACDU 0 5 AO 8335 VF-143 09281 ACDU 0 5 AO 8335	VF-2	ACDU	09113		0	5	AO	8345
VF-31 09473 ACDU 0 5 AO 8335 VF-143 09281 ACDU 0 5 AO 8335	VF-11	ACDU	09560		0	5	AO	8335
VF-143 09281 0 5 AO 8335	VF-31	ACDU	09473		0	5	AO	8335
ACDU 0 5 AO 8335	VF-143	ACDU	09281		0	5	AO	8335
	VF-201	ACDU			0	5	AO	8335

<sup>&</sup>lt;sup>1</sup> All billet requirements shown are programmed in the F-14 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document.

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES<sup>1</sup>

ACTIVITY		UIC	PHASING INCR.	BILL OFF	ETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
	TAR			0	5	AO	8345
NSAWC N7	ACDU	69190		0	5	AO	8345
SWATSLANT	ACDU	47157		0	5	AO	8335/8345
VFC-12	TAR	52994		0	5	AO	8345
VFC-13	TAR	52995		0	5	AO	8345
	IAK			U	3	AU	0343
FLEET SUPPORT		NAVY					
AIMD Dallas		00215					
AIMAD Fallon	TAR	(0405		0	3	AO	6801
AIMD Fallon	ACDU	60495		0	3	AO	6801
AIMD Oceana	ACDU	60191		U	3	AU	0001
	ACDU			0	3	AO	6801
CV-63 USS Kitty H		03363					
	ACDU			0	3	AO	6801
	SELRES			0	2	AO	6801
ACTIVITY TO				0	5		
CV-64 USS Conste		03364		0	2	40	/001
CVN-65 USS Enter	ACDU nrise	03365		0	3	AO	6801
CVIV-03 033 LINE	ACDU	03303		0	3	AO	6801
CV-67 USS Kenne		03367		ŭ	· ·	7.10	3331
	ACDU			0	3	AO	6801
CVN-68 USS Nimit		03368		_			
CVM (OUCC Finan	ACDU	02270		0	3	AO	6801
CVN-69 USS Eiser	nower ACDU	03369		0	3	AO	6801
CVN-70 USS Vinso		20993		U	3	AU	0001
OVIV 70 CCC VIIICC	ACDU	20770		0	3	AO	6801
CVN-71 USS Roos	evelt	21247					
	ACDU			0	3	AO	6801
CVN-72 USS Linco		21297		0	2	40	/001
CVN-73 USS Wash	ACDU	21412		0	3	AO	6801
CVIV-73 033 Wasi	ACDU	21412		0	3	AO	6801
CVN-74 USS Stenr		21847		Ü	Ü	710	0001
	ACDU			0	3	AO	6801
CVN-75 USS Trum		21853					
N   A \ A / A A   1   4	ACDU	F2021		0	3	AO	6801
NAWMU-1	A C D L I	52821		0	4	۸٥	4001
NAWCAD Patuxen	ACDU t River	00421		0	6	AO	6801
TWATER CALL I GLUACII	ACDU	0074 I		0	2	AO	6801
	ACDU			0	2	AO	6801/8345
ACTIVITY TO	ΓAL:			0	4		

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES<sup>1</sup>

ACTIVITY	UIC	PHASING INCR.	BILL OFF	ETS ENL	DESIGN RATING	PNEC/SNEC PMOS/SMOS
NAWCWD Point Mugu ACDU	63126		0	1	AO	6801
NAWS Point Mugu ACDU	0429A		0	3	AO	6801
NAWS China Lake SELRES	68937		0	1	AO	6801

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES<sup>2</sup>

DESIGN	PNEC/SNEC	PF	Ys	CF'	Y98	FY	99	FY	00	FY	<b>′</b> 01	FY	′02
RATING	PMOS/SMOS	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
OPERATIONAL ACTIVITY - ACDU													
AO	6801	0	12	0	0	0	0	0	0	0	0	0	0
AO	8335	0	25	0	0	0	0	0	0	0	0	0	0
AO	8345	0	70	0	0	0	0	0	0	0	0	0	0
	ONAL ACTIVITY -			_							_		
AO	8345	0	15	0	0	0	0	0	0	0	0	0	0
	JPPORT ACTIVITY			_							_		
AO	6801	0	57	0	0	0	0	0	0	0	0	0	0
AO	6801/8345	0	2	0	0	0	0	0	0	0	0	0	0
	JPPORT ACTIVITY		0	0	0	0	0	0	0	0	0	0	0
AO	6801	0	3	0	0	0	0	0	0	0	0	0	0
	JPPORT ACTIVITY			0	0	0	0	0	0	0	0	0	0
AO	6801	0	3	0	0	0	0	0	0	0	0	0	0
SUMMAR	Y TOTAL:												
OPERATION	ONAL ACTIVITY -	ACDU											
		0	107	0	0	0	0	0	0	0	0	0	0
OPERATION	ONAL ACTIVITY -										_		
	IDDODT ACTIVITY	0	15	0	0	0	0	0	0	0	0	0	0
FLEET SU	IPPORT ACTIVIT	Y – ACDI ()	J 59	0	0	0	0	0	0	0	0	0	0
FLEET SI	JPPORT ACTIVIT	-	37	U	U	U	U	U	U	U	U	U	U
TEEET OC	71 0111 11011111	0	3	0	0	0	0	0	0	0	0	0	0
FLEET SU	JPPORT ACTIVITY	Y – SELF	RES										
		0	3	0	0	0	0	0	0	0	0	0	0
GRAND T	OTAL:												
	ACDU	0	166	0	0	0	0	0	0	0	0	0	0
	TAR	0	18	0	0	0	0	0	0	0	0	0	0
	SELRES	0	3	0	0	0	0	0	0	0	0	0	0

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 $<sup>^{2}</sup>$  All billet requirements shown are programmed in the F-14 NTSP, the applicable CV/CVN Class Total Ship NTSP, or applicable Shore Activity Manning Document.

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS 3

## **INSTRUCTOR BILLETS**

TRAINING	ACTIVITY, LOCA	ATION, U	IC:	MTU 40	32 NAM	1TRAGF	RUDET		NAS No	orfolk	660	)46	
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PF OFF	Ys ENL	OFF	799 ENL	FY OFF	00 ENL	FY OFF	'01 ENL	FY OFF	'02 ENL	F' OFF	Y03 ENL
ACDU AO SELRES	6801/9502	0	7	0	7	0	7	0	7	0	7	0	7
AO TOTAL:	6801/9502	0	2 9	0	2 9	0	2 9	0	2 9	0	2 9	0	2 9
TRAINING	ACTIVITY, LOCA	ATION, U	IC:	MTU 40	30 NAM	1TRAGF	RUDET		NS Ma	yport	660	)69	
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PF OFF	Ys ENL	CF' OFF	Y99 ENL	FY OFF	00 ENL	FY OFF	'01 ENL	FY OFF	'02 ENL	F' OFF	Y03 ENL
ACDU AO SELRES	6801/9502	0	3	0	3	0	3	0	3	0	3	0	3
AO TOTAL:	6801/9502	0	1 4	0	1 4	0	1 4	0	1 4	0	1 4	0	1 4
TRAINING	ACTIVITY, LOCA	ATION, UI	IC:	MTU 40	33 NAM	1TRAGF	RUDET		NAS No	orth Islar	nd 660	)65	
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PF OFF	Ys ENL	CF' OFF	Y99 ENL	FY OFF	00 ENL	FY OFF	'01 ENL	FY OFF	'02 ENL	F' OFF	Y03 ENL
ACDU AO	6801/9502	0	4	0	4	0	4	0	4	0	4	0	4
TRAINING	ACTIVITY, LOCA	ATION, U	IC:	MTU 40	35 NAM	ITRAGE	RUDET		NAS W Isl.	/hidbey	660	)58	
DESIGN RATING	PNEC/SNEC PMOS/SMOS	PF OFF	Ys ENL	CF'	799 ENL	FY OFF	OO ENL	FY OFF	'01 ENL	FY OFF	'02 ENL	F' OFF	Y03 ENL
ACDU AO SELRES	6801/9502	0	0	0	3	0	3	0	3	0	3	0	3
AO TOTAL:	6801/9502	0 0	0	0	1 4	0 0	1 4	0 0	1 4	0	1 4	0	1 4

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<sup>&</sup>lt;sup>3</sup> Instructor billet requirements shown are for the total course throughput for applicable NEC, not just throughput required to support AIM-54.

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS 4

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs Off ENL		CFY99 OFF ENL		FY00 OFF ENL		FY01 OFF ENL		FY02 OFF ENL		FY03 OFF ENL	
LOCATION, OIC	USIVIC	OFF	LIVL	OFF	LIVL	OFF	LIVL	OFF	LIVL	OFF	LIVL	UFF	LIVL
MTU 4032 NAMTRAGRUDET, NAS Norfolk, 66046													
	USN	0	4.9	0	5.1	0	5.1	0	5.1	0	5.1	0	5.1
MTU 4030 NAMTRAGRUDET, NS Mayport, 66069													
	USN	0	0.8	0	0.7	0	0.1	0	0.1	0	0.1	0	0.1
MTU 4033 NAMTRAGRUDET, NAS North Island, 66065													
	USN	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8	0	3.8
MTU 4035 NAMTRAGRUDET, NAS Whidbey Island, 66058													
	USN	0	0	0	2.6	0	2.6	0	2.6	0	2.6	0	2.6
SUMMARY TOTAL:													
	USN	0	9.5	0	12.2	0	11.6	0	11.6	0	11.6	0	11.6
GRAND TOTAL:		0	9.5	0	12.2	0	11.6	0	11.6	0	11.6	0	11.6

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<sup>&</sup>lt;sup>4</sup> Chargeable student billet requirements shown are for the total course throughput for applicable NEC, not just throughput required to support AIM-54.

## II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS<sup>5</sup>

a. OFFICER - USN: NA

#### b. ENLISTED - USN:

		BILLET CFY99 FY00		Y00	FY01		FY02		FY03			
RATING	PNEC/SNEC	BASE	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM	+/-	CUM
Operationa	al Billets ACDU and	ITAR										
AO	6801	12	0	12	0	12	0	12	0	12	0	12
AO	8335	25	0	25	0	25	0	25	0	25	0	25
AO	8345	85	0	85	0	85	0	85	0	85	0	85
Fleet Supp	oort Billets ACDU ar	nd TAR										
AO	6801	57	0	57	0	57	0	57	0	57	0	57
AO	6801/8345	2	0	2	0	2	0	2	0	2	0	2
Instructor a	and Support (Staff)	Billets ACDU and	d TAR									
AO	6801/9502	14	0	17	0	17	0	17	0	17	0	17
Chargeabl	e Student Billets AC	CDU and TAR										
Ü		10	2	12	0	12	0	12	0	12	0	12
TOTAL US	SN ENLISTED BILI	LETS:										
Operationa	al	122	0	122	0	122	0	122	0	122	0	122
Fleet Supp	oort	62	0	59	0	59	0	59	0	59	0	59
Staff		14	0	17	0	17	0	17	0	17	0	17
Student		10	0	10	-1	9	0	9	0	9	0	9
SELRES		3	0	4	0	4	0	4	0	4	0	4

c. OFFICER - USMC: NA

d. ENLISTED - USMC: NA

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<sup>&</sup>lt;sup>5</sup> Billet base identified is only a portion of the total applicable NEC billet base, which is allocated for all air-launched weapons and ordnance maintenance. Billets are programmed through applicable CV/CVN Class Total Ship NTSPs and Shore Activity Manning Documents.

#### **II.B. PERSONNEL REQUIREMENTS**

#### II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS<sup>6</sup>

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance COURSE LENGTH: 6.0 Weeks

SEA TOUR LENGTH: Navy: 36 Months

ATTRITION FACTOR: Navy: 10 % BACKOUT FACTOR: 0.12

TRAINING		ACDU-TAR	CF'	Y99	FY	00	FY	01	FY	02	FY	03
ACTIVITY	SOURCE	SELRES	OFF	ENL								
MTU-4030 N	IAMTRAGRUD USN	ET, NS Mayport <sup>7</sup> ACDU-TAR	0	7	0	1	0	1	0	1	0	1
MTU-4032 N	IAMTRAGRU D	ET, NAS Norfolk										
	USN	ACDU-TAR	0	49	0	49	0	49	0	49	0	49
	USN	SELRES	0	0	0	0	0	1	0	0	0	0
		TOTAL	0	49	0	49	0	50	0	49	0	49

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance COURSE LENGTH: 6.0 Weeks SEA TOUR LENGTH: Navy: 36 Months

ATTRITION FACTOR: Navy: 10 % BACKOUT FACTOR: 0.12

TRAINING		ACDU-TAR CFY99		Y99	FY00		FY01		FY02		FY03	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU-4033 N	NAMTRAGRU [	DET, NAS North Isla	and									
	USN	ACDU-TAR	0	37	0	37	0	37	0	37	0	37
	USN	SELRES	0	1	0	1	0	1	0	1	0	1
		TOTAL	0	38	0	38	0	38	0	38	0	38
MTU-4035 N	NAMTRAGRU E USN USN	DET, NAS Whidbey ACDU-TAR SELRES TOTAL	Island 0 0 0	45 0 45	0 0 0	45 0 45	0 0 0	45 0 45	0 0 0	45 0 45	0 0 0	45 0 45
ACTIVITY T	OTAL:											
MTU-4030 N	NAMTRAGRU [	DET	0	7	0	1	0	1	0	1	0	1
MTU-4032 N	NAMTRAGRU D	DET	0	49	0	49	0	50	0	49	0	49
MTU-4033 N	NAMTRAGRU E	DET	0	38	0	38	0	38	0	38	0	38
MTU-4035 N	NAMTRAGRU D	)ET	0	45	0	45	0	45	0	45	0	45

<sup>&</sup>lt;sup>6</sup> ATIR shown are for the total course throughput for applicable NEC, not just throughput required to support AIM-54.

<sup>&</sup>lt;sup>7</sup> MTU 4030 NAMTRAGRUDET will begin to transfer functions to Everett, Washington in FY99.

### PART III - TRAINING REQUIREMENTS

The following elements are not affected by the AIM-54 Phoenix Missile System; therefore, they are not included in Part III of this NTSP:

III.A. Training Course Requirements

III.A.1. Initial Training Requirements

III.A.2. Follow-on Training

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

### III.A.2. FOLLOW-ON TRAINING

#### III.A.2.a. EXISTING COURSES

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET8

LOCATION, UIC: NAS Mayport, 66069

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

**SOURCE**: NAVY **STUDENT CATEGORY**: ACDU-TAR

CF'	<b>Y</b> 99	FY	00	FY	01	FY	)2	FY	03	
OFF	ENL	OFF	EN	OFF	EN	OFF	EN	OFF	ENL	
			L		L		L			
0	7	0	1	0	1	0	1	0	1	ATIR
0	6	0	1	0	1	0	1	0	1	Output
0.0	0.7	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	AOB
0.0	0.7	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	Chargeable

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET

LOCATION, UIC: NAS Norfolk, 66046

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

SOURCE: NAVY STUDENT CATEGORY: ACDU-TAR

CF	<b>/</b> 99	FY	00	FY	01	FY	02	FY	03	
OFF	ENL	OFF	EN	OFF	EN	OFF	EN	OFF	ENL	
			L		L		L			
0	49	0	49	0	49	0	49	0	49	ATIR
0	44	0	44	0	44	0	44	0	44	Output
0.0	5.1	0.0	5.1	0.0	5.1	0.0	5.1	0.0	5.1	AOB
0.0	5.1	0.0	5.1	0.0	5.1	0.0	5.1	0.0	5.1	Chargeable

**SOURCE**: NAVY **STUDENT CATEGORY**: SELRES

CF'	Y99	FY	00	FY	01	FY(	02	FY	03	
OFF	ENL	OFF	EN	OFF	EN	OFF	EN	OFF	ENL	
			L		L		L			
0	0	0	0	0	1	0	1	0	1	ATIR
0	0	0	0	0	1	0	1	0	1	Output
0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

<sup>8</sup> MTU 4030 NAMTRAGRUDET will begin to transfer functions to Everett, Washington in FY99.

III-2

**TRAINING ACTIVITY:** MTU-4033 NAMTRAGRUDET **LOCATION, UIC:** NAS North Island, 66065

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

**SOURCE**: NAVY **STUDENT CATEGORY**: ACDU-TAR

CF'	Y99	FY	00	FY	01	FY	02	FY	03	
OFF	ENL	OFF	EN	OFF	EN	OFF	EN	OFF	ENL	
			L		L		L			
0	37	0	37	0	37	0	37	0	37	ATIR
0	33	0	33	0	33	0	33	0	33	Output
0.0	3.8	0.0	3.8	0.0	3.8	0.0	3.8	0.0	3.8	AOB
0.0	3.8	0.0	3.8	0.0	3.8	0.0	3.8	0.0	3.8	Chargeable

**SOURCE**: NAVY **STUDENT CATEGORY**: SELRES

CF\	/99	FY	00	FY	01	FY(	)2	FY	03	
OFF	ENL	OFF	EN	OFF	EN	OFF	EN	OFF	ENL	
			L		L		L			
0	1	0	1	0	1	-	-	0	1	ATIR
0	1	0	1	0	1	0	1	0	1	Output
0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

**TRAINING ACTIVITY:** MTU-4035 NAMTRAGRUDET **LOCATION, UIC:** NAS Whidbey Island, 66058

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

SOURCE: NAVY STUDENT CATEGORY: ACDU-TAR

CF	/98	FY	99	FY	′00	FY	01	FY	02	
OFF	ENL									
0	0	0	50	0	50	0	50	0	50	ATIR
0	0	0	45	0	45	0	45	0	45	Output
0.0	0	0.0	2.6	0.0	2.6	0.0	2.6	0.0	2.6	AOB
0.0	0	0.0	2.6	0.0	2.6	0.0	2.6	0.0	2.6	Chargeable

### PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the AIM-54 Phoenix Missile System; therefore, they are not included in Part IV of this NTSP:

- IV.B Courseware Requirements
  - IV.B.1. Training Services
- IV.C. Facility Requirements
  - IV.C.1. Facility Requirements Summary (Space/Support) by Activity
  - IV.C.2. Facility Requirements Detailed by Activity and Course
  - IV.C.3. Facility Project Summary by Program

#### IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

TRAINING ACTIVITY: NATTC

LOCATION, UIC: NAS Pensacola, 63082

CIN, COURSE TITLE: C-646-2011, Aviation Ordnanceman Common Core Class A1

C-646-2012, Aviation Ordnanceman Airwing Strand Class A1 C-646-2013, Aviation Ordnanceman Ships Company Strand Class A1

ITEM TYPE OR RANGE QTY DATE **GFE NUMBER EQUIPMENT OF REPAIR PARTS REQD** REQD **CFE STATUS** TTE 001 Adapter, ADU-399A/E 1 GFE On-site 002 Adapter, ADU-406/E 1 **GFE** On-site Height adapter (aft) ADU-GFE On-site 003 1 433A/E Height adapter (forward) 004 1 **GFE** On-site ADU-434A/E 005 Beam, hoisting MHU-129/E 1 GFE On-site Container, CNU-242A/E 1 GFE On-site 006

TRAINING ACTIVITY: MTU-1007 NAMTRAGRUDET

LOCATION, UIC: NAS Oceana, 66045

CIN, COURSE TITLE: C-646-9962, F-14A/B Armament Systems Organizational Maintenance (Initial)

C-646-9963, F-14 Armament Systems Organizational Maintenance (Career) C-646-9906, F-14D Armament Systems Organizational Maintenance (Difference)

ITEM <u>NUMBER</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE <u>REQD</u>	GFE <u>CFE</u>	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					

TRAINING ACTIVITY: SWATSLANT LOCATION, UIC: NAS Oceana, 47157

CIN, COURSE TITLE: D-646-1644, F-14A/B Conventional Weapons Loading

D-646-1645, F-14A/B Integrated Weapons Team Refresher Training

D-646-1646, F-14D Conventional Weapons Loading

D-646-1648, F-14D Integrated Weapons Team Refresher Training

ITEM <u>Number</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE <u>REQD</u>	GFE <u>CFE</u>	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					

#### IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

TRAINING ACTIVITY: MTU-4030 NAMTRAGRUDET

LOCATION, UIC: NS Mayport, 66069

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM <u>Number</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE <u>REQD</u>	GFE <u>CFE</u>	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					
005	Beam, hoisting MHU-129/E		1		GFE	On-site
006	Container, CNU-242A/E		1		GFE	On-site

TRAINING ACTIVITY: MTU-4032 NAMTRAGRUDET

LOCATION, UIC: NAS Norfolk, 66046

CIN, COURSE TITLE: D-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM <u>NUMBER</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE <u>REQD</u>	GFE CFE	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					
005	Beam, hoisting MHU-129/E		1		GFE	On-site
006	Container, CNU-242A/E		1		GFE	On-site

**TRAINING ACTIVITY:** MTU-4033 NAMTRAGRUDET **LOCATION, UIC:** NAS North Island, 66065

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM <u>NUMBER</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE REQD	GFE <u>CFE</u>	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					
005	Beam, hoisting MHU-129/E		1		GFE	On-site
006	Container, CNU-242A/E		1		GFE	On-site

## IV.A.1. TTE/GPTE/SPTE/ST/GPETE/SPETE

**TRAINING ACTIVITY:** MTU-4035 NAMTRAGRUDET **LOCATION, UIC:** NAS Whidbey Island, 66058

CIN, COURSE TITLE: E-646-7007, General Shipboard/NAS Weapons Department AVORD Maintenance

ITEM <u>Number</u>	<u>EQUIPMENT</u>	TYPE OR RANGE OF REPAIR PARTS	QTY <u>REQD</u>	DATE <u>REQD</u>	GFE <u>CFE</u>	<u>STATUS</u>
TTE						
001	Adapter, ADU-399A/E		1		GFE	On-site
002	Adapter, ADU-406/E		1		GFE	On-site
003	Height adapter (aft) ADU-		1		GFE	On-site
	433A/E					
004	Height adapter (forward)		1		GFE	On-site
	ADU-434A/E					
005	Beam, hoisting MHU-129/E		1		GFE	On-site
006	Container, CNU-242A/E		1		GFE	On-site

### IV.A.2. TRAINING DEVICES

**DEVICE**: Captive Air Training Missile

**DESCRIPTION OF DEVICE:** The Phoenix CATM, designated as ATM-54A or ATM-54C are equivalent to tactical missiles in

weight, balance, and external appearance. A Phoenix CATM consists of functional guidance

and control sections and inert armament and propulsion sections.

MANUFACTURER: NA
CONTRACT NUMBER: NA
TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QTY <u>REQD</u>	DATE REQD	RFT <u>DATE</u>	<u>STATUS</u>	COURSES SUPPORTED
VF-101, NAS Oceana, 09067	10			On-site	D-2A-1601, D-2D-1601 D-2A-1602, D-2D-1602 D-2A-1603, D-2D-1603 D-2A-1604, D-2D-1604 D-2A-1605, D-2D-1605 D-2A-1631, D-2D-1631 D-2A-1634, D-2D-1634 D-2A-1637, D-2D-1637 D-2A-1640, D-2D-1640
SWATSLANT, NAS Oceana, 47157	8			On-site	SFARP SFWE
VF-14, NAS Oceana, 09084	8			On-site	T&R
VF-32, NAS Oceana, 09053	8			On-site	T&R
VF-41, NAS Oceana, 09774	8			On-site	T&R
VF-154, Yokosuka, 09678	8			On-site	T&R
VF-211, NAS Oceana, 09086	8			On-site	T&R
VF-213, NAS Oceana, 09934	8			On-site	T&R
VF-102, NAS Oceana, 09717	8			On-site	T&R
VF-103, NAS Oceana, 09718	8			On-site	T&R
VF-2, NAS Oceana, 09113	8			On-site	T&R
VF-11, NAS Oceana, 09560	8			On-site	T&R
VF-31, NAS Oceana, 09473	8			On-site	T&R
VF-143, NAS Oceana, 09281	8			On-site	T&R
VF-201, JRB NAS Fort Worth, 09309	8			On-site	T&R
TOTAL:	122				

## IV.A.2. TRAINING DEVICES

**DEVICE:** Dummy Air Training Missile, DATM-7F-11

**DESCRIPTION OF DEVICE:** The DATM is physically representative of the AIM-54. It is a training device to facilitate

instruction and familiarization for transporting, handling, loading, and visual inspection procedures for organizational- and intermediate-level training purposes. The DATM is not certified for flight, and is designed for ground training use only. The Phoenix CATM is a

suitable replacement for the Phoenix DATM requirement.

MANUFACTURER: NA
CONTRACT NUMBER: NA
TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QTY <u>REQD</u>	DATE <u>REQD</u>	RFT <u>DATE</u>	<u>STATUS</u>	COURSES SUPPORTED
MTU-1007, NAMTRAGRUDET NAS Oceana, 66045	2			On-site	C-646-9973 C-646-9974
SWATSLANT NAS Oceana, 47157	2			On-site	D-646-1644 D-646-1645 D-646-1646 D-646-1648
MTU-4030, NAMTRAGRUDET NAS Mayport, 66069	2			On-site	C-122-3111
MTU-4032, NAMTRAGRUDET NAS Norfolk, 66046	2			On-site	C-122-3111
MTU-4033, NAMTRAGRUDET NAS North Island, 66065	2			On-site	C-122-3111
NATTC, NAS Pensacola, 63082	2			On-site	C-646-2011 C-646-2012 C-646-2013
NAS/Joint Reserve Base (JRB) New Orleans New Orleans, Louisiana, 00206	2			On-site	F-14 Conventional Weapons Loading
NAS/JRB Fort Worth Fort Worth, Texas, 00215	2			On-site	F-14 Conventional Weapons Loading
TOTAL:	16				

**IV.A.2. TRAINING DEVICES** 

**DEVICE**: Practical Explosive Ordnance Disposal System Trainer (PEST)

**DESCRIPTION OF DEVICE:** The basic performance requirements for a PEST are: 1) to replicate the external features of

tactical missile for visual identification purposes; 2) to possess the same weight and center of

gravity as the tactical missile for handling realism; 3) to contain inert explosive train

components; and 4) to disassemble identically to the tactical missile (where applicable) in order

to practice Render Safe Procedures (RSP). An AIM-54 PEST was never developed nor procured, however, practical training requirements for AIM-54 are currently met through the use

of inert tactical missiles and/or components and CATMs.

MANUFACTURER: NA
CONTRACT NUMBER: NA
TEE STATUS: NA

TRAINING ACTIVITY LOCATION, UIC	QTY <u>REQD</u>	DATE <u>REQD</u>	RFT <u>DATE</u>	<u>STATUS</u>	COURSES SUPPORTED
NAVSCOLEOD Eglin Air Force Base, 46207	1			On-site	A-431-0011 A-431-0012
EODTEU ONE NAS Barbers Point, 30202	1			On-site	G-431-0001
EODTEU TWO Fort Story, 43505	1			On-site	G-431-0001

**DEVICE:** Classroom Explosive Ordnance Disposal System Trainer (CEST)

**DESCRIPTION OF DEVICE:** The basic performance requirements for a CEST are: 1) to replicate the external features of

tactical missile for visual identification purposes; 2) to contain inert explosive train components; and 3) to provide cut-away areas in its exterior in order to view the inert explosive train

components for teaching RSPs. An AIM-54 CEST was never developed nor procured;

however, classroom training requirements for AIM-54 are currently supported through the use of inert tactical missiles and/or components that have been modified (cut-away) to view internal,

inert explosive components.

MANUFACTURER: NA
CONTRACT NUMBER: NA
TEE STATUS: NA

TRAINING ACTIVITY

LOCATION, UIC

NAVSCOLEOD

QTY
DATE
RFT
COURSES
SUPPORTED

On-site
A-431-0011

Eglin Air Force Base, 46207 A-431-0012

#### IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

AIM-54 data is integrated within applicable existing follow-on courses. There are no stand-alone AIM-54 courses.

TRAINING ACTIVITY: VF-101

LOCATION, UIC: NAS Oceana, 09067

CIN, COURSE TITLE: D-2A-1601, F-14A/B Pilot Cat 1 D-2D-1601, F-14A/B NFO Cat 1

D-2A-1602, F-14A/B Pilot Cat 2 D-2D-1602, F-14A/B NFO Cat 2 D-2A-1603, F-14A/B Pilot Cat 3 D-2D-1603, F-14A/B NFO Cat 3 D-2A-1604, F-14A/B Pilot Cat 4 D-2D-1604, F-14A/B NFO Cat 4 D-2A-1605, F-14A/B Pilot Cat 5 D-2D-1605, F-14A/B NFO Cat 5 D-2A-1631, F-14D Pilot Cat 1 D-2D-1631, F-14D NFO Cat 1 D-2A-1634, F-14D Pilot Cat 2 D-2D-1634, F-14D NFO Cat 2 D-2A-1637, F-14D Pilot Cat 3 D-2D-1637, F-14D NFO Cat 3 D-2A-1640, F-14D Pilot Cat 4 D-2D-1640, F-14D NFO Cat 4

QTY DATE

TYPE OF MATERIAL OR AIDREQDREQDSTATUSSFTS AIM-54 Brief1 SetOn Board

TRAINING ACTIVITY: Strike Weapons And Tactics School Atlantic

LOCATION, UIC: NAS Oceana, 47157

CIN, COURSE TITLE: Strike Fighter Advanced Readiness Program (SFARP)

Strike Fighter Weapons Employment (SFWE)

TYPE OF MATERIAL OR AID REQD REQD STATUS

SFTS AIM-54 Brief 1 Set On Board

TRAINING ACTIVITY: Naval Strike and Air Warfare Center N7 (Topgun)

LOCATION, UIC: NAS Fallon, 69190

CIN, COURSE TITLE: Strike Fighter Training Program (SFTP)

Strike Fighter Tactics Instructor (SFTI) Strike Fighter Weapons and Tactics (SFWT)

QTY DATE

TYPE OF MATERIAL OR AIDREQDREQDSTATUSSFTS AIM-54 Brief1 SetOn Board

TRAINING ACTIVITY: NATTC

LOCATION, UIC: NAS Pensacola, 63082

CIN, COURSE TITLE: C-646-2011, Aviation Ordnance Common Core Class A1

C-646-2012, Aviation Ordnance Airwing Strand Class A1

C-646-2013, Aviation Ordnance Ships Company Strand Class A1

QTY DATE

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 Training Package1 SetOn Board

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: MTU 1007 NAMTRAGRUDET

LOCATION, UIC: NAS Oceana, 66045

CIN, COURSE TITLE: C-646-9962, F-14A/B Armament Systems Initial Organizational Maintenance

C-646-9963, F-14A/B Armament Systems Career Organizational Maintenance C-646-9906, F-14D Armament Systems Organizational Maintenance (Difference)

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 Training Package1 SetOn Board

TRAINING ACTIVITY: Strike Weapons And Tactic School Atlantic

LOCATION, UIC: NAS Oceana, 47084

CIN, COURSE TITLE: D-646-1644, F-14A/B Conventional Weapons Loading

D-646-1645, F-14A/B Integrated Weapons Team Refresher Training

D-646-1646, F-14D Conventional Weapons Loading

D-646-1648, F-14D Integrated Weapons Team Refresher Training

TYPE OF MATERIAL OR AID
AIM-54 Training Package

OTY
REQD
REQD
STATUS
On Board

TRAINING ACTIVITY: MTU 4030 NAMTRAGRUDET

LOCATION, UIC: NS Mayport, 66069

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

QTY DATE
VPE OF MATERIAL OR AID REOD REOD

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 Training Package1 SetOn Board

TRAINING ACTIVITY: MTU 4032 NAMTRAGRUDET

LOCATION, UIC: NAS Norfolk, 66046

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

TYPE OF MATERIAL OR AID QTY DATE

REQD REQD

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 Training Package1 SetOn Board

TRAINING ACTIVITY: MTU 4033 NAMTRAGRUDET LOCATION, UIC: NAS North Island, 66065

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

QTY DATE

TYPE OF MATERIAL OR AID

AIM-54 Training Package

REQD
1 Set

On Board

**TRAINING ACTIVITY:** MTU 4035 NAMTRAGRUDET **LOCATION, UIC:** NAS Whidbey Island, 66058

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

QTY DATE

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 Training Package1 SetOn Board

## N88-NTSP-A-50-8007C/A April 1999

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

TRAINING ACTIVITY: NAVSCOLEOD

**LOCATION, UIC:** Eglin Air Force Base, 46207 **CIN, COURSE TITLE:** A-431-0011, EOD Phase II (Navy)

A-431-0012, EOD Phase II

TYPE OF MATERIAL OR AID QTY DATE REQD REQD

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 RSP Data1 SetOn Board

TRAINING ACTIVITY: EODTEU ONE

LOCATION, UIC: NAS Barbers Point, 30202

CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

QTY DATE

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 RSP Data1 SetOn Board

**TRAINING ACTIVITY:** EODTEU TWO **LOCATION, UIC:** Fort Story, 43505

CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TYPE OF MATERIAL OR AID QTY DATE

REQD REQD

TYPE OF MATERIAL OR AIDREQDREQDSTATUSAIM-54 RSP Data1 SetOn Board

TRAINING ACTIVITY: VF-101

LOCATION, UIC: NAS Oceana, 09067

CIN, COURSE TITLE: D-2A-1601, F-14A/B Pilot Cat 1 D-2D-1601, F-14A/B NFO Cat 1

D-2A-1602, F-14A/B Pilot Cat 2 D-2D-1602, F-14A/B NFO Cat 2 D-2A-1603, F-14A/B Pilot Cat 3 D-2D-1603, F-14A/B NFO Cat 3 D-2A-1604, F-14A/B Pilot Cat 4 D-2D-1604, F-14A/B NFO Cat 4 D-2A-1605, F-14A/B Pilot Cat 5 D-2D-1605, F-14A/B NFO Cat 5 D-2D-1631, F-14D NFO Cat 1 D-2A-1631, F-14D Pilot Cat 1 D-2D-1634, F-14D NFO Cat 2 D-2A-1634, F-14D Pilot Cat 2 D-2A-1637, F-14D Pilot Cat 3 D-2D-1637, F-14D NFO Cat 3 D-2A-1640, F-14D Pilot Cat 4 D-2D-1640, F-14D NFO Cat 4

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	QTY <u>REQD</u>	DATE <u>REQD</u>	<u>STATUS</u>
NATOPS Flight Manual Navy Model F-14, NA 01- F14AAA-1	Hard copy	6		On board
NATOPS Pocket Checklist, NA 01-F14AAA-1B	Hard copy	6		On board
Tactical Manual, NA 01-F14AAA-1.1T	Hard copy	6		On board

TRAINING ACTIVITY: Strike Weapons And Tactics School Atlantic

LOCATION, UIC: NAS Oceana, 47157

CIN, COURSE TITLE: Strike Fighter Advanced Readiness Program (SFARP)

Strike Fighter Weapons Employment (SFWE)

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	REQD	REQD	<u>STATUS</u>
NATOPS Flight Manual Navy Model F-14, NA 01- F14AAA-1	Hard copy	6		On board
NATOPS Pocket Checklist, NA 01-F14AAA-1B	Hard copy	6		On board
Tactical Manual, NA 01-F14AAA-1.1T	Hard copy	6		On board

**TRAINING ACTIVITY:** Naval Strike and Air Warfare Center N7 (Topgun)

LOCATION, UIC: NAS Fallon, 69190

CIN, COURSE TITLE: Strike Fighter Training Program (SFTP)

Strike Fighter Tactics Instructor (SFTI)
Strike Fighter Weapons and Tactics (SFWT)

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	QTY <u>REQD</u>	DATE <u>REQD</u>	<u>STATUS</u>
NATOPS Flight Manual Navy Model F-14, NA 01-F14AAA-1	Hard copy	6		On board
NATOPS Pocket Checklist, NA 01-F14AAA-1B	Hard copy	6		On board
Tactical Manual, NA 01-F14AAA-1.1T	Hard copy	6		On board

TRAINING ACTIVITY: NATTC

LOCATION, UIC: NAS Pensacola, 63082

CIN, COURSE TITLE: C-646-2011, Aviation Ordnance Common Core Class A1

C-646-2012, Aviation Ordnance Airwing Strand Class A1

C-646-2013, Aviation Ordnance Ships Company Strand Class A1

		QTY	DATE	
TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	<u>REQD</u>	REQD	<u>STATUS</u>
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8		On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8		On board
Conventional Weapons Checklist (Phoenix), NA 01-F14AAA-75-35	Hard copy	8		On board
Aircraft, Release and Control (Missile), Conventional Weapons Checklist, NA 01-F14AAA-75-1A2	Hard copy	8		On board
Conventional Weapons Checklist, F14A/B Arm and De-Arm, NA 01-F14AAA-75-40	Hard copy	8		On board
CV/NAS Intermediate Missile Handling & Maintenance Instructions, AIM-54A/C/ECCM/Sealed,	Hard copy	8		On board
NA 01-AIM54-2-3 Guided Missile AIM-54 Phoenix Ship Weapons Installation Manual, NA 11-120-26	Hard copy	8		On board
Airborne Weapons Assembly Manual, NA 11-140-6.1	Hard copy	8		On board
Armament Weapons Support Equipment, NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives, NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Armament Weapons Handling Equipment (Shipboard), NA 19-100-2	Hard copy	8		On board

TRAINING ACTIVITY: MTU 1007 NAMTRAGRUDET

LOCATION, UIC: NAS Oceana, 66045

CIN, COURSE TITLE: C-646-9962, F-14A/B Armament Systems Initial Organizational Maintenance

C-646-9963, F-14A/B Armament Systems Career Organizational Maintenance C-646-9906, F-14D Armament Systems Organizational Maintenance (Difference)

AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8	On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8	On board
Conventional Weapons Checklist (Phoenix), NA 01-F14AAA-75-35	Hard copy	8	On board
Aircraft, Release and Control (Missile), Conventional Weapons Checklist, NA 01-F14AAA-75-1A2	Hard copy	8	On board
Conventional Weapons Checklist, F14A/B Arm and De-Arm, NA 01-F14AAA-75-40	Hard copy	8	On board

TRAINING ACTIVITY: Strike Weapons And Tactic School Atlantic

LOCATION, UIC: NAS Oceana, 47084

CIN, COURSE TITLE: D-646-1644, F-14A/B Conventional Weapons Loading

D-646-1645, F-14A/B Integrated Weapons Team Refresher Training

D-646-1646, F-14D Conventional Weapons Loading

D-646-1648, F-14D Integrated Weapons Team Refresher Training

AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8	On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8	On board
Conventional Weapons Checklist (Phoenix), NA 01-F14AAA-75-35	Hard copy	8	On board
Aircraft, Release and Control (Missile), Conventional Weapons Checklist, NA 01-F14AAA-75-1A2	Hard copy	8	On board
Conventional Weapons Checklist, F14A/B Arm and De-Arm, NA 01-F14AAA-75-40	Hard copy	8	On board

TRAINING ACTIVITY: MTU 4030 NAMTRAGRUDET

LOCATION, UIC: NS Mayport, 66069

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

		QTY	DATE	
TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	<u>REQD</u>	<u>REQD</u>	<u>STATUS</u>
AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8		On board
CV/NAS Intermediate Missile Handling & Maintenance Instructions, AIM-54A/C/ECCM/Sealed, NA 01-AIM54-2-3	Hard copy	8		On board
Guided Missile AIM-54 Phoenix Ship Weapons Installation Manual, NA 11-120-26	Hard copy	8		On board
Airborne Weapons Assembly Manual, NA 11-140-6.1	Hard copy	8		On board
Armament Weapons Support Equipment, NA 11-140-25	Hard copy	8		On board
Approved Handling Equipment for Weapons and Explosives, NA 19-100-1.2 (OP-2173)	Hard copy	8		On board
Armament Weapons Handling Equipment (Shipboard), NA 19-100-2	Hard copy	8		On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume I NA 11-120A-1.1	Hard copy	8		On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume II NA 11-120A-1.2	Hard copy	8		On board
Ammunition and Explosives Afloat, NAVSEA OP-4	Hard copy	8		On board
Ammunition and Explosives Ashore, NAVSEA OP-5	Hard copy	8		On board

TRAINING ACTIVITY: MTU 4032 NAMTRAGRUDET

LOCATION, UIC: NAS Norfolk, 66046

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8	On board
CV/NAS Intermediate Missile Handling & Maintenance Instructions, AIM-54A/C/ECCM/Sealed,	Hard copy	8	On board
NA 01-AIM54-2-3			
Guided Missile AIM-54 Phoenix Ship Weapons Installation Manual, NA 11-120-26	Hard copy	8	On board
Airborne Weapons Assembly Manual, NA 11-140-6.1	Hard copy	8	On board
Armament Weapons Support Equipment, NA 11-140-25	Hard copy	8	On board
Approved Handling Equipment for Weapons and Explosives, NA 19-100-1.2 (OP-2173)	Hard copy	8	On board
Armament Weapons Handling Equipment (Shipboard), NA 19-100-2	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume I NA 11-120A-1.1	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume II NA 11-120A-1.2	Hard copy	8	On board
Ammunition and Explosives Afloat, NAVSEA OP-4	Hard copy	8	On board
Ammunition and Explosives Ashore, NAVSEA OP-5	Hard copy	8	On board

**TRAINING ACTIVITY:** MTU 4033 NAMTRAGRUDET **LOCATION, UIC:** NAS North Island, 66065

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8	On board
CV/NAS Intermediate Missile Handling & Maintenance Instructions, AIM-54A/C/ECCM/Sealed,	Hard copy	8	On board
NA 01-AIM54-2-3 Guided Missile AIM-54 Phoenix Ship Weapons Installation Manual, NA 11-120-26	Hard copy	8	On board
Airborne Weapons Assembly Manual, NA 11-140-6.1	Hard copy	8	On board
Armament Weapons Support Equipment, NA 11-140-25	Hard copy	8	On board
Approved Handling Equipment for Weapons and Explosives, NA 19-100-1.2 (OP-2173)	Hard copy	8	On board
Armament Weapons Handling Equipment (Shipboard), NA 19-100-2	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume I NA 11-120A-1.1	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume II NA 11-120A-1.2	Hard copy	8	On board
Ammunition and Explosives Afloat, NAVSEA OP-4	Hard copy	8	On board
Ammunition and Explosives Ashore, NAVSEA OP-5	Hard copy	8	On board

**TRAINING ACTIVITY:** MTU 4035 NAMTRAGRUDET **LOCATION, UIC:** NAS Whidbey Island, 66058

CIN, COURSE TITLE: C-122-3111, Air Launched Guided Missiles Intermediate Maintenance

AIM-7, AIM-9, AIM-54, and AIM-120 Guided Missile Work Unit Code Manual, NA A1-AIM AA-WUC-800	Hard copy	8	On board
CV/NAS Intermediate Missile Handling & Maintenance Instructions, AIM-54A/C/ECCM/Sealed,	Hard copy	8	On board
NA 01-AIM54-2-3 Guided Missile AIM-54 Phoenix Ship Weapons Installation Manual, NA 11-120-26	Hard copy	8	On board
Airborne Weapons Assembly Manual, NA 11-140-6.1	Hard copy	8	On board
Armament Weapons Support Equipment, NA 11-140-25	Hard copy	8	On board
Approved Handling Equipment for Weapons and Explosives, NA 19-100-1.2 (OP-2173)	Hard copy	8	On board
Armament Weapons Handling Equipment (Shipboard), NA 19-100-2	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume I NA 11-120A-1.1	Hard copy	8	On board
Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume II NA 11-120A-1.2	Hard copy	8	On board
Ammunition and Explosives Afloat, NAVSEA OP-4	Hard copy	8	On board
Ammunition and Explosives Ashore, NAVSEA OP-5	Hard copy	8	On board

TRAINING ACTIVITY: NAVSCOLEOD

LOCATION, UIC: Eglin Air Force Base, 46207
CIN, COURSE TITLE: A-431-0011, EOD Phase II (Navy)
A-431-0012, EOD Phase II

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	QTY <u>REQD</u>	DATE <u>REQD</u>	<u>STATUS</u>
Explosive Ordnance Disposal Book, EODB60G-02-2-34-5	CD-ROM	150		On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8		On board
Conventional Weapons Checklist, NA 01-F14AAA-75-21	Hard copy	8		On board

TRAINING ACTIVITY: EODTEU ONE

LOCATION, UIC: NAS Barbers Point, 30202

CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	QTY <u>REQD</u>	DATE <u>REQD</u>	<u>STATUS</u>
Explosive Ordnance Disposal Book, EODB60G-02-2-34-5	CD-ROM	4		On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8		On board
Conventional Weapons Checklist, NA 01-F14AAA-75-21	Hard copy	8		On board

**TRAINING ACTIVITY:** EODTEU TWO **LOCATION, UIC:** Fort Story, 43505

CIN, COURSE TITLE: G-431-0001, EOD Pre-deployment Team Training

TECHNICAL MANUAL TITLE, NUMBER	<u>MEDIUM</u>	QTY <u>REQD</u>	DATE <u>REQD</u>	<u>STATUS</u>
Explosive Ordnance Disposal Book, EODB60G-02-2-34-5	CD-ROM	4		On board
Airborne Weapons/Stores Loading Manual, NA 01-F14AAA-75	Hard copy	8		On board
Conventional Weapons Checklist, NA 01-F14AAA-75-21	Hard copy	8		On board

# PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
AIR-418	Commence initial training	1982	Completed
AIR-418	DT/OT Training	Aug 1983 Jun 1985	Completed Completed
PMA259	Initial operating capability AIM-54A AIM-54C AIM-54C/ECCM Sealed Missile	1974 1986 1988	Completed Completed Completed
PMA259	Material support date  AIM-54A  AIM-54C  AIM-54C/ECCM Sealed Missile	Apr 1975 Aug 1986 Aug 1988	Completed Completed Completed
AIR-418	Training devices delivered	FY91	Completed
PMA205	Follow-on training updated for AIM-54C ECCM/Sealed	FY91	Completed
OP 111	Approve and Promulgate NTP A-50-8007A	Sep 87	Completed
OPNAV N889H	Approve and Promulgate NTP A-50-8007B	Sep 92	Completed
PMA205	Promulgate Draft NTSP for Fleet Comment	Aug 97	Completed
OPNAV N889H	Promulgate Approved NTSP	Apr 99	Completed

# PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
Identify squadron proficiency training requirements, e.g., CATM, in Draft NTSP	PMA205-5F	July 97	Closed

# PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	PHONE: NUMBER COMMERCIAL/DSN, FAX: COMMERCIAL/DSN, INTERNET ADDRESS
LCDR Robert Vance CNO N880C7	OPNAV Resource Sponsor	(703) 695-1841, DSN 225 (703) 693-8823, DSN 223 (fax) vance.robert@hq.navy.mil
CAPT Frank J. Smith CNO N889H	Aviation Technical Training	(703) 604-7730, DSN 664 (703) 604-6939 (fax) smith.frank@hq.navy.mil
MGYSGT Dave Anderson CNO N889H2A	NTSP Policy	(703) 604-7722, DSN 664 (703) 604-6939 (fax) anderson.david@hq.navy.mil
AZC Scott Dean CNO N889H7	NTSP Manager	(703) 604-7714, DSN 664 (703) 604-6939 (fax) dean.scott@hq.navy.mil
LCDR Dave Street CNO N125E	Acquisition Management, Human Systems Integration Requirements, Aviation	(703) 614-5364, DSN 224 (703) 697-8684 (fax) n125e@bupers.navy.mil
LCDR Crane NAVMAC Code 30	Aviation Manpower	(901) 874-5894, DSN 882 (901) 874-7125 (fax) nkmh1@navtap.navy.mil
CDR Rick Sadsad CNO N132D1	Aviation Mechanical, Enlisted Plans and Career Management Division, Community Manager	(703) 695-3806, DSN 225 (703) 614-6502 (fax), DSN 224 p221c@bupers.navy.mil
LT Mark Bailey NAVPERSCOM NPC-404C	Aviation & Armament Rating Assignment Officer	(901) 874-3657, DSN 882 (901) 874-2642 (fax) p404c@persnet.navy.mil
CAPT D. Venlet NAVAIRSYSCOM PMA259	AAM Program Manager	(301) 757-7311, DSN 757 (301) 757-7310 (fax) venletdj@navair.navy.mil
Mr. V. Cronauer NAVAIRSYSCOM PMA259H/J	Phoenix Deputy Program Manager	(301) 757-7494, DSN 757 (301) 757-7487 (fax) cronauervt@navair.navy.mil
Mr. B. Long NAVAIRSYSCOM PMA205-3J	Phoenix Training System Manager	(301) 757-8104, DSN 757 (301) 757-6941 (fax) longwf@navair.navy.mil
Mr. C. Lewis NAWCWD CL 341000D	Technical Training Support	(760) 939-4623, DSN 437 (760) 927-1155 (fax) lewiscw@navair.navy.mil
Mr. E. Wallace NAWCWD PM 311200E	Assistant Program Manager, Logistics	(805) 484-6335, DSN 351 (805) 484-6331 (fax) wallace@mugu.navy.mil
Mr. L. Hill Letterkenny Army Depot	Phoenix Guidance & Control Section DOP Manager	(717) 267-9474 x229, DSN 570 (717) 267- 8035 (fax)

# PART VII - POINTS OF CONTACT

NAME, ACTIVITY, CODE	FUNCTION	PHONE: NUMBER COMMERCIAL/DSN, FAX: COMMERCIAL/DSN, INTERNET ADDRESS
		lhill@cmh1.lead.army.mil
BTCM Cagle NAVSCOLEOD CIS4	EOD Weapons Acquisition and Training Aids Acquisition	(850) 882-0840, DSN 872 (850) 882-9519 (fax)
LCDR S. Langlais CNET 2512	Aviation Ordnance Training	(850) 452-8911, DSN 452 (850) 452-4901 (fax) cnet.t2512@smtp.cnet.navy.mil
AOCM W. Carroll NAMTRAGRU 2206	Missile Systems Training	(850) 452-9787, DSN 922 (850) 452-9769 (fax) namtghq.2206@smtp.cnet.navy.mil
LCDR D. McManus CINCPACFLT N4211	Current (Load) Operations	(808) 474-6430, DSN 474 <u>u4211@cpf.navy.mil</u>
CAPT M. Knowls CINCLANTFLT N411A2	Ordnance Officer	(757) 322-6859, DSN 836 (757) 322-6714 (fax) clf30@pinn.net
LT J. King COMNAVRESFOR N85(A)	Ordnance Officer	(504) 678-6846, DSN 678 (504) 678-1442 (fax) kingjc@cnrf.nola.navy.mil
AOCS H. Daniel COMNAVRESFOR N85A	Ordnance Officer	(504) 678-6846, DSN 678 (504) 678-1442 (fax) daniela@cnrf.nola.navy.mil
Mr. Phil Szczyglowski NAVAIRSYSCOM AIR-3.4.1.1	Competency Manager	(301) 757-9182, DSN 757 (301) 342-4723 (fax) szczyglowskipr@navair.navy.mil
AVCM Roger Lovern NAVAIRSYSCOM AIR-3.4.1.1	NTSP Manager	(301) 757-9183, DSN 757 (301) 342-4723 (fax) lovernre@navair.navy.mil
AMCS Greg Johnson NAVAIRSYSCOM AIR-3.4.1.1	NTSP Analyst	(301) 757-9191, DSN 757 (301) 342-4723 (fax) johnsongp@navair.navy.mil